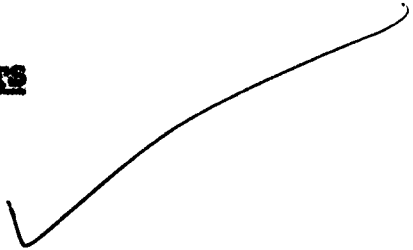


**CHAPTER-IV**

**ANALYSIS OF STATEMENTS**

- a) Liquidity Ratios
  - b) Solvency Ratios
  - c) Leverage Ratios
  - d) Profitability Ratios
  - e) Activity Ratios
- 

#### 4.1 INTRODUCTION :

In the preceding chapter, the theoretical elaboration of various ratios that help in the financial analysis of any organisation has been given. We now turn to the actual calculation of ratios on the basis of the data of the 'Deccan Co-operative Spinning Mills Ltd., Ichalkaranji.'

#### Classification of Ratios :

Ratios are classified according to their importance, traditional classification and functional classification.

Classification of Ratios according to nature of items or Traditional classification (i) Balance sheet Ratios - These ratios exhibit relationship between two items or group of items in the balance sheet.

- i) Current Ratio
- ii) Acid Test Ratio
- iii) Debt Equity Ratio
- iv) Ratio of long term debt - to shareholders fund
- v) Proprietary or Equity Ratio
- vi) Solvency Ratio
- vii) Fixed Assets to Net worth.
- viii) Ratio of current assets to proprietors fund.
- ix) Capital gearing ratio
- x) Total investment to long-term liabilities.
- xi) Ratio of current liabilities to proprietors fund.

**Revenue Statement Ratio :**

The ratios disclosing relationship between two items or group of items in manufacturing account, trading account and profit and loss account are revenue statement ratios.

- i) Inventory Turnover Ratio
- ii) Interest Coverage Ratio
- iii) G.P. Ratio
- iv) N.P. Ratio
- v) Operating Ratio
- vi) Expenses Ratio
- vii) Operating profit Ratio.

**Composite Ratios :**

The ratios indicates relationship of certain items in balance sheet with some figures in the revenue statement.

- i) Debtors Turnover Ratio
- ii) Average Collection Period
- iii) Creditors Turnover
- iv) Average payment period
- v) Working capital Turnover
- vi) Fixed Assets Turnover
- vii) Return on shareholders investment
- viii) Return on equity capital
- ix) Earning per share
- x) Return on capital employed.

### Ratio Analysis :

Calculation of Ratios - while calculating ratios classification of ratios is done according to the solvency, liquidity, profitability and leverage tests. Though various basis of classification are available objective of the analysis is considered for the convenience of completion of dissertation. Main object of analysing financial data of the concerned is to judge the liquidity, efficiency, solvency, profitability and leverage of the mill.

#### Liquidity Ratios :

- i) Current Ratio
- ii) Quick Ratio
- iii) Debtors Turnover Ratio
- iv) Inventory Turnover Ratio.

#### Solvency Ratios :

- i) Debt Equity Ratio
- ii) Ratio of long-term debt to shareholders fund
- iii) Proprietary or equity Ratio
- iv) Solvency Ratio
- v) Ratio of Fixed Assets to Net worth.
- vi) Ratio of current assets to proprietors fund.
- vii) Interest Coverage Ratio
- viii) Fixed Assets Turnover Ratio.

**Leverage Ratios :**

- i) Capital Gearing.
- ii) Total Investment to long-term liabilities
- iii) Debt Equity Ratio
- iv) Ratio of current liabilities to proprietors fund

**Profitability Ratios :**

**a) General Profitability -**

- i) Operating Ratio
- ii) Expenses Ratio
- iii) Operating Profit Ratio
- iv) G.P. Ratio
- v) N.P. Ratio

**b) Overall Profitability -**

- i) Return on shareholders investment or net worth
- ii) Return on equity capital
- iii) Earning per share
- iv) Return on capital employed

**Activity Ratios :**

- i) Inventory Turnover Ratio
- ii) Debtors Velocity
- iii) Debtors Average collection period
- iv) Creditors velocity
- v) Creditors Average payment period
- vi) Working Capital Turnover.

#### 4.2 LIQUIDITY RATIOS :

##### Current Ratio :

Current ratio is the relationship between current assets and current liabilities. Current assets consists of cash, bank account, excise current account, stores and spares parts, coal, cotton at godown, cotton-in-process, yarn work-in-process, yarn at packing section and bonded godown, yarn at selling centre, saleable cotton waste at godown, hard waste, debtors, deposits, purchases of cotton, stores purchases and expenses, building construction, purchases of machinery, employees, purchases of shares, earnest octroi money, excise duty, sales tax, prepaid insurance, prepaid expenses, advance payment of income tax.

Current liabilities consists of refundable deposits from members, loan from the Maharashtra State Co-operative Bank Ltd., Bombay (hypothecated, mortgage and clean cash credit) Deposits from Contractors, Deposits from yarn, Deposits from others, sundry creditors, expenses, Education fund subscription, outstanding amount payable to others, sales tax, interest, provision, for income tax, Dividend, Gratuity provision.

Current Ratio for five years of the mill.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Ratio for 1980-81

$$= \frac{6,69,96,908.34}{4,32,50,221.68}$$

= 1.55:1.

Current Ratio for 1981-82

$$= \frac{8,38,74,225.68}{5,54,57,868.98}$$

= 1.52:1

Current Ratio for 1982-83

$$= \frac{8,65,61,144.13}{6,12,29,650.36}$$

= 1.42 : 1

Current Ratio for 1983-84

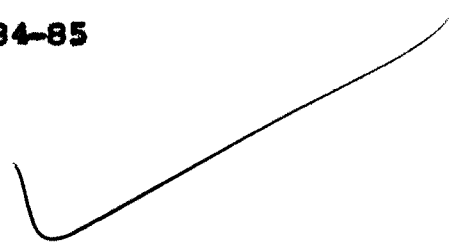
$$= \frac{8,41,80,732.16}{6,25,43,390.59}$$

= 1.31 : 1

Current Ratio for 1984-85

$$= \frac{8,21,81,630.91}{6,47,48,330.05}$$

= 1.26:1



**For Total Current Assets and Total Current assets  
and current liabilities.**

Acid Test Ratio :

Acid test ratio is the relationship between liquid assets and liquid liabilities. Liquid assets consists of current assets excepting stock and all current liabilities except bank overdraft.

Liquid assets consists of cash, bank, excise account current, stores and spares, parts, coal, cotton at godown, cotton in process, yarn in process, debtors, deposits, purchases of cotton, stores purchases and expenses, building construction, purchases of machinery, employees, purchases of shares, earnest octroi money, excise duty, sales tax, prepaid insurance, prepaid expenses, advance payment of income tax.

Liquid liabilities consists of refundable deposits from members, loan, taken from the Maharashtra State Co-operative Bank Ltd., Bombay (Hypothecation, mortgage, clean cash credit) Deposits from contractors, Deposits from yarn, Deposits from others, sundry creditors, Expenses Education Fund subscription, outstanding amount payable to others, sales tax, interest, provision for income tax, Dividend gratuity provision.

Liquid Ratio

$$= \frac{\text{Liquid Assets}}{\text{Liquid Liabilities}}$$

Liquid Ratio for five years of the Mill.

Hence Liquid Assets = Current Assets - Stock.



Stock consists of the items of cotton at godown, yarn-in-work in progress, cotton in work in progress, cotton in work in progress, yarn at packing section and bonded godown, yarn at selling centre, saleable cotton waste at godown, hardwaste.

Current Assets (excluding stock)  
Current Liability

1980-81	=	<u>2,78,32,898.06</u>
		4,32,50,221.68
	=	0.64:1
1981-82	=	<u>3,43,01,225.82</u>
		5,54,57,868.98
	=	0.62:1
1982-83	=	<u>3,47,31,300.40</u>
		6,12,29,650.36
	=	0.57:1
1983-84	=	<u>1,56,41,198.05</u>
		6,25,43,390.59
	=	0.25:1
1984-85	=	<u>2,69,37,214.10</u>
		6,47,48,330.05
	=	0.42:1

For liquid assets see chart of liquid assets and  
 for liquid liabilities see chart of liquid liabilities.



#### 4.3 SOLVENCY RATIOS :

Solvency is the ability of the mill to pay its debt as and when it is matured. These ratios will indicate the analysis at long-term financial position or solvency.

##### 1) Debt Equity Ratio :

Debt-equity ratio relates all recorded creditors claims an assets to the owners recorded claims in order to measure the firms obligations to creditors in relation to funds provided by the owners.

$$\text{Debt Equity Ratio} = \frac{\text{Outsiders funds}}{\text{Shareholders fund}}$$

Outsiders funds consists of secured loan taken from Industrial Finance Corporation of India, The Industrial Credit and Investment Corporation of India Ltd., Life Insurance Corporation of India, The Maharashtra State Co-operative Bank Ltd., Bombay.

Unsecured loan from the State Industrial Investment Corporation of Maharashtra Ltd. and Fixed Deposits.

Current Liabilities and Provisions includes Refundable deposits from members, The Maharashtra State Co-operative Bank Ltd. Bombay - (a) Hypothecated cotton and yarn stock, (b) Mortgage, (c) clearn cash credit, (d) freeshipment cash credit.

Deposits includes from contractors and from yard takers and others.

Current liabilities also includes sundry creditors, expenses, education fund subscription, others, sales tax, interest, provision for income tax, Dividend, Gratuity provision.

Shareholders Fund :

Shareholders fund consists of share capital and Reserves and surplus.

Reserves and surplus includes Reserve Fund, Depreciation Fund, Development Rebate Reserve, Investment allowance, Reserve Fund, Capital Redemption Reserve Fund, Dividend for bad and doubtful debt fund, building fund, profit and loss account, Credit balance and deduct profit and loss account Dr. balance.

Outsiders Fund for 1980-81

Non Refundable deposits from members	95,14,319.49
Refundable deposits from members	91,57,130.00
Secured Loan	1,30,65,000.00
Unsecured Loan	33,77,268.00
Loan for working capital	1,59,56,619.55
Deposits	2,06,401.48
Current Liability and Provisions	1,09,36,982.23
Interest	31,59,078.42
Dividend	8,360.00
Income Tax Provision	38,24,650.00
	<hr/>
Total Outsider's Fund	6,92,05,809.17

Outsider's Fund for 1981-82

Non Refundable deposits from members	95,14,319.48
Refundable deposits from members	1,12,64,750.00
Secured Loan	2,59,80,000.00
Unsecured Loan	40,51,268.00
Loan for working capital	2,85,62,578.22
Deposits	10,09,260.98
Current Liabilities and Provisions	75,23,936.26
Interest	40,06,493.46
Provision for Income Tax	38,24,650.00
Dividend	11,200.00

Total Outsider's Fund 9,57,48,456.41

Outsider's Fund for 1982-83

Non Refundable deposits from members	95,14,319.49
Refundable deposits from members	1,12,66,440.00
Secured Loan	3,06,05,000.00
Unsecured Loan	43,98,268.00
Loan for working capital	3,01,31,720.73
Deposits	15,15,304.63
Current Liability and Provisions	1,13,38,389.04
Interest	41,87,305.96
Current Liabilities and provision	
Provision for Income tax	38,24,650.00
Dividend	3,840.00

Total Outsider's Fund 10,67,88,237.85

Outsider's Fund for 1983-84

Non Refundable deposits from members	95,14,319.49
Refundable deposits from members	1,12,66,440.00
Secured Loan	3,73,70,000.00
Unsecured Loan	53,81,641.00
Loan for working capital	3,61,18,075.69
Deposits	26,78,731.06
Current Liability and Provisions	1,08,61,742.28
Interest	40,08,800.55
Provision for income tax	-
Dividend	1,920.00
	-----
Total Outsiders Fund :	11,72,01,670.08

Outsider's Fund for 1984-85

Non refundable deposits from members	95,14,319.49
Refundable deposits from members	1,12,66,440.00
Secured Loan	2,34,30,000.00
Unsecured Loan	89,55,460.00
Loan for working capital	3,36,81,849.74
Deposits	29,23,249.84
Current Liability and provisions	1,54,76,853.35
Interest	40,23,016.91
Dividend	1,920.00
	-----
Total Outsiders Fund :	10,62,73,109.53

Debt Equity Ratio for 1980-81

Outsiders Fund  
Shareholders Fund

$$= \frac{6,92,05,809.17}{8,59,63,652.68}$$

$$= 0.81:1$$

Debt Equity Ratio for 1981-82

Outsiders Fund  
Shareholders Fund

$$= \frac{9,57,48,436.41}{9,38,43,921.36}$$

$$= 1.02:1$$

Debt Equity Ratio for 1982-83

Outsiders Fund  
Shareholders Fund

$$= \frac{10,67,88,237.85}{10,49,26,211.49}$$

$$= 1.02:1$$

Debt Equity Ratio 1983-84

Outsiders Fund  
Shareholders Fund

$$= \frac{11,72,01,670.08}{11,84,62,498.29}$$

$$= 0.98:1$$

**Debt Equity Ratio for 1984-85**

Outsiders Fund  
Shareholders Fund

$$= \frac{10,62,73,103.53}{12,54,19,558.16}$$

$$= 0.84:1$$

**For shareholders fund see chart of Shareholders'**

**Fund.**

**Ratio of Long-term debt to Shareholders Fund :**

This ratio is calculated by following formula :

$$= \frac{\text{Long term debt}}{\text{Shareholders Funds}}$$

Long-term debt of the mill includes secured loan and unsecured loan secured loan taken from Industrial Finance Corporation of India, Industrial Development Bank of India, The Industrial Credit and Investment Corporation of India Ltd., Life Insurance Corporation of India, The Maharashtra State Co-operative Bank Ltd., Bombay, unsecured loan from the State Industrial and Investment Corporation of Maharashtra Limited.

Shareholders fund consists of share capital and Reserve and Surplus. Reserves and surplus is of the following items Reserve Fund, Depreciation fund, Development rebate reserve, investment allowance reserve fund, capital redemption reserve fund, Dividend Equalisation fund, common good fund, Reserve for bad and doubtful fund, building fund and profit and loss account debit and credit balance.

Ratio of long term debt to shareholders funds for five years :

For shareholders fund see chart of shareholders fund.



Long-term debt for 1980-81

1) Industrial Finance Corporation of India	34,50,000
2) Industrial Development Bank of India	54,50,000
3) Industrial Credit and Investment Corporation	33,65,000
4) Life Insurance Corporation of India	8,00,000
5) The Industrial and Investment Corporation of Maharashtra Ltd.	33,77,268
Total long-term debt :	<hr/> 1,64,42,268

Long-term debt for 1981-82

1) Non-refundable deposits from members secured loan from Industrial Finance Corporation of India for the fourth expansion programme	21,50,000.00
2) The Industrial Credit and Investment Corporation of India Ltd. :	
i) Fourth Expansion programme	80,000.00
ii) Modernisation Scheme	23,25,000.00
3) Life Insurance Corporation of India for fourth expansion scheme	4,00,000.00
4) The Maharashtra State Co-operative Bank Ltd., Bombay - Middle term loan for replacement and renovation scheme	1,66,75,000.00
5) Unsecured loan from the State Industrial and Investment Corporation of Maharashtra Ltd.	40,51,268.00
6) Industrial Development Bank of India :	
i) Fourth Expansion plan	21,00,000.00
ii) Modernisation scheme	22,50,000.00
Total long-term debt	<hr/> 3,00,31,268.00

Long-term loan debt 1982-83

1) Non refundable deposits from members	
2) Secured loan from :	
a) Industrial Finance Corporation of India fourth expansion plan	10,00,000.00
b) Industrial Development Bank of India :	
1) Fourth expansion plan	12,80,000.00
ii) Modernisation scheme	19,50,000.00
c) Industrial Credit and Investment Corporation of India Ltd.,	
1) Fourth expansion plan	-
ii) Modernisation scheme	19,75,000.00
d) Life Insurance Corporation of India - Fourth expansion Plan	-
e) The Maharashtra State Co-operative Bank Ltd., Bombay - Middle term loan for replacement and renovation scheme	2,44,00,000.00
3) Unsecured loan from the State Industrial and Investment Corporation of Maharashtra Ltd.	43,98,268.00
<b>Total long-term debt :</b>	<b>3,50,03,268.00</b>

Long term-debt for 1983-84

1) Non refundable deposits from members	
2) Secured loan taken from :	
a) Industrial Finance Corporation of India - fourth expansion plan	-
b) Industrial Development Bank of India - Fourth expansion plan	2,40,000.00
c) Modernisation scheme	16,50,000.00
c) The Industrial Credit and Investment Corporation of India Ltd., Modernisation Scheme	16,50,000.00
d) The State Co-operative Bank Ltd., Bombay - Middle term loan -	
i) For replacement and	3,22,80,000.00
ii) For generating sets	16,00,000.00
e) Unsecured loan from the State Industrial and Investment Corporation of Maharashtra Ltd.	53,81,641.00
Total long-term debt	<hr/> 4,27,51,641.00

Long term-debt for 1984-85

1) Non refundable deposits from members	
2) Secured loan taken from :	
a) The Industrial Development Bank of India :	
i) Fourth expansion plan	-
ii) For modernisation scheme	13,50,000-00
b) The Industrial Credit and Investment Corporation of India Ltd. - Modernisation scheme	13,50,000.00
c) The Maharashtra State Co-operative Bank Ltd., Bombay - Middle term loan	
i) For replacement and renovation scheme	1,95,30,000.00
ii) Generating sets	12,00,000.00
d) The State Industrial and Investment Corporation of Maharashtra Ltd.	59,55,460.00
	<hr/>
Total long-term debt	2,93,85,460.00

Ratio of long term debt to shareholders fund

$$= \frac{\text{Long term debt}}{\text{Shareholders Fund}}$$

$$1980-81 = \frac{2,59,56,587.42}{8,59,63,652.68}$$

$$= .30 : 1$$

$$1981-82 = \frac{3,95,45,587.42}{9,38,43,421.36}$$

$$= .42 : 1$$

$$1982-83 = \frac{4,45,17,587.42}{10,49,26,211.49}$$

$$= .42 : 1$$

$$1982-84 = \frac{5,22,65,960.42}{11,84,62,498.29}$$

$$= .44 : 1$$

$$1984-85 = \frac{3,88,99,779.42}{12,54,19,558.16}$$

$$= .31 : 1$$

Proprietary Ratio    Equity Ratio

$$= \frac{\text{Shareholders Fund}}{\text{Total Assets}}$$

Shareholders fund consists of share capital and reserves and surplus. Following items are taken in reserves and surplus Reserve Fund, Depreciation Fund, Development Rebate Reserve,

Investment Allowance Reserve Fund, Capital Redemption Reserve Fund, Dividend equalisation fund, common Good Fund, Reserve for land and doubtful debt fund, Building fund, profit and Loss A/c etc.

Total assets means fixed assets, Investments, current assets, fixed assets includes land, building and roads, plant and machinery, Dead stock and furniture, Moler and Steam pipe line, fire hydrants, weights and measures, works instruments, vehicles, water installation, telephone and Telex installation, Trolley line, Jackwell and pipe line, Library books.

Investment includes Nation Savings Bonds, Co-operative Society's shares, Industrial Finance Corporation of India.

Current assets includes cash, Bank Excise Account (current), stores and spares parts coal, cotton at godown, cotton in work in progress, yarn work in progress, yarn at packing section and bonded godown, yarn at selling centre, salealote cotton waste at godown, Hard waste, Debtors, deposits, purchases of cotton, stores purchases and expanses. Building construction, purchases of machinery, employees, purchases of shares, Earnest octroi money, refundable excise duty, refundable sales tax, prepaid insurance, prepaid expenses, advance payment of income tax.

Total asset means assets and properties excluding P & L A/c and fictitious assets.

**Proprietary Ratio :**

**=  $\frac{\text{Shareholder's Fund}}{\text{Total Assets}}$**

1980-81	=	$\frac{8,59,63,652.68}{6,69,96,908.34 + 8,81,72,553.51}$
	=	$\frac{8,59,63,652.68}{15,51,69,461.85}$
	=	0.55 : 1
1981-82	=	$\frac{9,38,43,921.36}{8,38,74,225.68 + 10,57,18,152.09}$
	=	$\frac{9,38,43,921.36}{18,95,92,377.77}$
	=	0.49 : 1
1982-83	=	$\frac{10,49,26,211.49}{8,65,61,144.13 + 12,51,53,305.16}$
	=	$\frac{10,49,26,211.49}{21,17,14,449.29}$
	=	0.49 : 1
1983-84	=	$\frac{11,84,62,498.29}{8,41,80,732.16 + 14,14,83,436.11}$
	=	$\frac{11,84,62,498.29}{22,56,24,168.27}$
	=	0.52 : 1
1984-85	=	$\frac{12,59,19,558.16}{8,21,81,630.91 + 14,95,01,036.78}$
	=	$\frac{12,59,19,558.16}{23,16,82,667.69}$
	=	0.54 : 1

For shareholders fund see chart of shareholders fund  
and for total assets see chart of fixed assets, current assets  
and investments.

Solvency Ratio :

$$= \frac{\text{Total Liabilities to outsiders}}{\text{Total Assets}}$$

Solvency Ratio for 1980-81

$$= \frac{5,05,35,359.68}{10,43,82,502.65}$$

$$= 0.48:1$$

Solvency Ratio for 1981-82

$$= \frac{7,49,69,386.92}{13,17,75,448.11}$$

$$= 0.57:1$$

Solvency Ratio for 1982-83

$$= \frac{8,60,07,478.36}{14,29,94,343.88}$$

$$= 0.60:1$$

Solvency Ratio for 1983-84

$$= \frac{9,64,20,581.59}{14,23,88,823.79}$$

$$= 0.68:1$$

Solvency Ratio for 1984-85

$$= \frac{8,54,91,350.04}{13,45,21,585.88}$$

$$= 0.64:1$$



**Solvency Ratio :**

$$= \frac{\text{Total Liabilities to Outsiders}}{\text{Total Assets}}$$

Total liabilities to outsiders includes secured loan, unsecured loan, current liabilities and provisions etc. Total liabilities to outsiders excludes deposits from members refundable and deposits from members non-refundable. Because at last they are owner claims.

**Total Liabilities to outsiders 1980-81 :**

Secured Loan		1,30,65,000.00
Unsecured Loan		1,28,91,587.49
Current Liabilities and provisions		4,32,50,221.68
		<u>6,92,06,809.17</u>

**Less Deposits**

Refundable	91,57,130.00	
Non-refundable	<u>95,14,319.49</u>	1,86,71,449.49

**Total Liabilities to Outsiders** 5,05,35,359.68

**Total Liabilities to Outsiders 1981-82 :**

Secured Loan		2,59,80,000.00
Unsecured Loan		1,43,10,587.49
Current Liabilities and provisions		5,54,57,868.92
		<u>9,57,48,456.41</u>

**Less Deposits**

Refundable	1,12,64,750.00	
Non-refundable	<u>95,14,319.49</u>	2,07,79,069.49

**Total Liabilities to Outsiders** 7,49,69,386.92

**Total Liabilities to Outsiders 1982-83**

Secured Loan		3,06,05,000.00
Unsecured Loan		1,49,53,587.00
Current Liabilities and provisions		6,12,29,650.36
		<u>10,67,88,237.85</u>
Less Deposits		
Refundable	1,12,66,440.00	
Non-refundable	<u>95,14,319.49</u>	2,07,80,759.49
		<u>8,60,07,478.36</u>
<b>Total Liabilities to Outsiders</b>		<b>8,60,07,478.36</b>

**Total Liabilities to Outsiders 1983-84**

Secured Loan		3,73,70,000.00
Unsecured Loan		1,72,87,950.49
Current Liabilities and provisions		6,25,43,390.59
		<u>11,72,01,341.08</u>
Less Deposits		
Refundable	1,12,66,440.00	
Non-refundable	<u>95,14,319.49</u>	2,07,80,759.49
		<u>9,64,20,581.59</u>
<b>Total Liabilities to Outsiders</b>		<b>9,64,20,581.59</b>

**Total Liabilities to Outsiders 1984-85**

Secured Loan		2,34,30,000.00
Unsecured Loan		1,80,94,779.49
Current Liabilities and provisions		6,47,48,330.04
		<u>10,62,72,109.53</u>
Less Deposits		
Refundable	1,12,66,440.00	
Non-refundable	<u>95,14,319.49</u>	
		<u>2,07,80,759.49</u>
<b>Total Liabilities to outsiders</b>		<b>8,54,91,350.04</b>

Total assets means fixed assets after depreciation, investments, current assets loans and advances. It means all assets excluding fictitious assets and profit and loss account reserve balance.

**Calculation of Total Assets 1980-81**

Net Fixed Assets	3,60,80,144.31
Current Assets	6,69,96,908.34
Investments	13,16,450.00
	<u>13,17,75,448.11</u>

**Calculation of Total Assets 1982-83**

Net Fixed Assets	5,49,25,749.75
Current Assets	8,65,61,144.13
Investments	15,07,450.00
	<u>14,29,94,343.88</u>

**Calculation of Total Assets 1983-84**

<b>Net Fixed Assets</b>	<b>5,66,45,091.63</b>
<b>Current Assets</b>	<b>8,41,80,732.16</b>
<b>Investments</b>	<b>15,62,700.00</b>
	<hr/>
	<b>14,23,88,523.79</b>

**Calculation of Total Assets 1984-85**

<b>Net Fixed Assets</b>	<b>5,10,76,754.97</b>
<b>Current Assets</b>	<b>8,21,81,630.91</b>
<b>Investments</b>	<b>13,63,200.00</b>
	<hr/>
	<b>13,45,21,585.88</b>

**For total assets see chart of fixed assets,  
current assets and investments assets.**

Ratio of Fixed Assets to  
Proprietors Fund :

$$= \frac{\text{Fixed Assets (after depreciation)}}{\text{Shareholders Fund}}$$

Fixed assets includes land, building and roads, plant and machinery, boiler and steam pipe line, dead stock and furniture, fire hydrants, weights and measures, works instruments, vehicles, water installation, telephone and telex installation, trolleyline, Jackwell and pipeline, library books etc.

Shareholders fund includes share capital and Reserves and surplus. Reserves and surplus consists of Reserve Fund, Depreciation fund, Development Rebate Reserve, Investment allowance Reserve Fund, Capital Redemption Reserve Fund, Dividend equalisation fund, common good fund, Reserve for bad and doubtful debts fund, Building fund, profit and loss account Dr. and Cr. balance.

Ratio of fixed assets to proprietors fund for 1980-81

$$\frac{\text{Fixed Assets (after depreciation)}}{\text{Shareholders Fund (after depreciation Fund)}}$$

$$= \frac{3,60,80,144.31}{8,59,63,652.68}$$

$$= 0.419:1$$

Ratio of fixed assets to proprietor's Fund for 1981-82

$$= \frac{\text{Fixed Assets (after depreciation)}}{\text{Shareholders Fund}}$$

$$= \frac{4,65,84,772.43}{9,38,43,921.36}$$

$$= 0.49:1$$

**Ratio of Fixed Assets to Proprietors Fund for 1982-83**

= Fixed Assets (after depreciation)  
Shareholders Fund

= 5,49,25,749.75  
10,49,26,211.49

= 0.52:1

**Ratio of Fixed Assets to Proprietors Fund for 1983-84**

= Fixed Assets (after depreciation)  
Shareholder's Fund

= 5,66,45,091.63  
11,84,62,498.29

= 0.48:1

**Ratio of Fixed Assets to Proprietor's Fund for 1984-85**

= Fixed Assets (after depreciation)  
Shareholders Fund

= 5,10,76,754.97  
12,54,19,558.16

= 0.41:1

**For Net Fixed Assets see chart of net fixed assets  
and for shareholders fund see chart of shareholders fund.**

**Ratio of Current Assets to Proprietors Fund :**

$$= \frac{\text{Current Assets}}{\text{Shareholders Fund}}$$

Current assets includes cash, bank, excise account current, stores and spares parts, coal, cotton at godown, cotton in work in progress, yarn in work in progress, yarn at packing section and bonded godown, yarn at selling centre, saleable cotton waste at godown, hard waste, debtors, deposits, purchases of cotton, stores purchases, expenses, building construction, purchases of machinery, employees, purchases of shares, Earnest octroi money, refundable excise duty, refundable sales tax, prepaid insurance, advance payment of income tax.

Shareholders fund consists of shares capital and reserves and surplus, Reserve and surplus heading has the following items Reserve Fund, Depreciation fund, Development Rebate Reserve, Investment allowance Reserve Fund, Dividend equalisation fund, common good fund, Reserve for bad and doubtful debt fund Building fund, profit and loss account Dr. and Cr. balance.

**Ratio of Current Assets to Proprietors Fund for 1980-81**

$$= \frac{\text{Current Assets}}{\text{Proprietors Fund}}$$

$$= \frac{6,62,96,908.34}{8,59,63,652.68}$$

$$= 0.78:1$$

**Ratio of Current Assets to Proprietors Fund for 1981-82**

$$\begin{aligned} &= \frac{\text{Current Assets}}{\text{Proprietors Fund}} \\ &= \frac{8,38,74,225.68}{9,38,43,921.36} \\ &= 0.89:1 \end{aligned}$$

**Ratio of Current Assets to Proprietors Fund for 1982-83**

$$\begin{aligned} &= \frac{\text{Current Assets}}{\text{Proprietors Fund}} \\ &= \frac{8,65,61,144.13}{10,49,26,211.49} \\ &= 0.82:1 \end{aligned}$$

**Ratio of Current Assets to Proprietors Fund for 1983-84**

$$\begin{aligned} &= \frac{\text{Current Assets}}{\text{Proprietors Fund}} \\ &= \frac{8,41,80,732.16}{11,84,62,498.29} \\ &= 0.71:1 \end{aligned}$$

**Ratio of Current Assets to Proprietors Fund for 1984-85**

$$\begin{aligned} &= \frac{\text{Current Assets}}{\text{Proprietors Fund}} \\ &= \frac{8,21,81,630.91}{12,54,19,558.16} \\ &= 0.66:1 \end{aligned}$$

**For current assets see chart of current assets and  
for proprietors fund see chart of shareholders' fund.**



Interest Coverage or  
Debt Service Ratio :

$$= \frac{\text{N.P. (before interest and tax)}}{\text{Fixed interest charges}}$$

N.P. before (interest and taxes)

= N.P.	5,07,190.37
+ Interest	55,54,851.19
	<hr/>
	60,62,041.56

Interest Coverage Ratio for 1980-81

$$= \frac{\text{N.P. before interest and taxes}}{\text{Fixed interest charges}}$$

$$= \frac{60,62,041.56}{55,54,851.19}$$

$$= 1.09$$

Interest Coverage Ratio for 1981-82

$$\text{Net Loss} \quad - (13,66,075.42)$$

$$+ \text{Interest} \quad 84,63,734.82$$

$$\text{N.P. before interest} \quad \underline{70,97,659.40}$$

$$\frac{\text{N.P. (before interest and taxes)}}{\text{Interest}}$$

$$= \frac{70,97,659.40}{84,63,734.82}$$

$$= .84:1$$

**Interest Coverage Ratio for 1982-83**

<b>Net Loss</b>	<b>-(11,28,240.62)</b>
<b>+ Interest</b>	<b>96,21,094.19</b>
	<hr/>
<b>Net profit before interest</b>	<b>84,92,853.57</b>

**N.P. before interest**  
**Interest**

$$= \frac{84,92,853.57}{96,21,094.19}$$

$$= 0.88:1$$

**Interest Coverage Ratio for 1983-84**

<b>Net Loss</b>	<b>-(62,62,347.27)</b>
<b>+Interest</b>	<b>1,19,216.79</b>
	<hr/>
<b>Net profit before interest</b>	<b>56,97,869.52</b>

**Net profit before interest and tax**  
**Interest**

$$= \frac{56,97,869.52}{1,19,60,216.79}$$

$$= 0.48:1$$

**Interest Coverage Ratio for 1984-85**

<b>Net Loss</b>	<b>-(91,03,801.46)</b>
<b>+ Interest</b>	<b>1,33,43,540.33</b>
<b>+ Income Tax</b>	<b>28,316.00</b>
	<hr/>
<b>Net profit before interest</b>	<b>42,39,738.87</b>

**N.P. before interest and taxes**  
**Interest**

$$= \frac{42,39,738.87}{1,33,43,540.33}$$

$$= 0.32:1$$

• Fixed Assets Turnover :

$$= \frac{\text{Sales}}{\text{Net Fixed Assets}}$$

Fixed Assets includes land, building and roads, plant and machinery, boiler and steam pipe line, dead stock and furniture, fire hydrants, weights and measures, works instruments, vehicles, water installation, telephone and telex installation, trolley line, jackwell and pipe line, library books.

Sales includes sales of yarn, cotton waste, hard waste.

Net fixed assets means assets with depreciated value.

Sales for Five Years

<u>Year</u>	<u>Sales</u>
✓ 1980-81	11,53,76,919-61
1981-82	13,60,34,235-67
1982-83	14,05,74,717-59
1983-84	14,19,36,395-04
1984-85	19,04,39,964-88

For Net Fixed Assets see chart of Net Fixed Assets.

**Ratio of Fixed Assets Turnover for 1980-81**

$$\begin{aligned} &= \frac{\text{Sales}}{\text{Net Fixed Assets}} \\ &= \frac{11,53,76,919.61}{3,60,80,144.31} \\ &= 3.19:1 \end{aligned}$$

**Ratio of Fixed Assets Turnover for 1981-82**

$$\begin{aligned} &= \frac{\text{Sales}}{\text{Net Fixed Assets}} \\ &= \frac{13,60,24,235.67}{4,65,84,772.43} \\ &= 2.92:1 \end{aligned}$$

**Ratio of Fixed Assets Turnover for 1982-83**

$$\begin{aligned} &= \frac{\text{Sales}}{\text{Net Fixed Assets}} \\ &= \frac{14,05,74,717.59}{5,49,25,749.75} \\ &= 2.56:1 \end{aligned}$$

**Ratio of Fixed Assets Turnover for 1983-84**

$$\begin{aligned} &= \frac{\text{Sales}}{\text{Net Fixed Assets}} \\ &= \frac{14,19,36,395.04}{5,66,45,091.63} \\ &= 2.51:1 \end{aligned}$$

**Ratio of Fixed Assets Turnover for 1984-85**

$$\begin{aligned} &= \frac{\text{Sales}}{\text{Net Fixed Assets}} \\ &= \frac{19,04,39,964.88}{5,10,76,754.97} \\ &= 3.73:1 \end{aligned}$$

#### 4.4 ANALYSIS OF CAPITAL STRUCTURE OR LEVERAGE :

##### 1) Capital Gearing Ratio :

$$\frac{\text{Equity Capital + Surplus and Reserves}}{\text{Preference Share and Loan Capital}}$$

$$\frac{\text{Shareholders Fund}}{\text{Loan Capital}}$$

Preference shares are not issued by the company. Hence loan capital includes only secured loan and unsecured loan and loan for working capital.

Secured loan is taken from Industrial Finance Corporation of India for fourth expansion plan, Industrial Development Bank of India for fourth expansion plan and for modernisation scheme, the Industrial Credit and Investment Corporation of India Ltd., for modernisation scheme, The Maharashtra State Co-operative Bank Ltd., Bombay middle term loan for replacement and renovation scheme and for generating sets. Loan taken from Life Insurance Corporation of India.

Unsecured loan consists of taken from The State Industrial and Investment Corporation of Maharashtra Ltd.

Total loan capital for five years :

Loan Capital for 1980-81

Secured Loan :

Industrial Finance Corporation of India	34,50,000.00
Industrial Development Bank of India :	
1) Fourth expansion plan	29,00,000.00
ii) Modernisation scheme	25,50,000.00
The Industrial Credit and Investment Corporation of India Ltd. :	
1) Fourth expansion plan	7,40,000.00
ii) Modernisation scheme	26,25,000.00
Life Insurance Corporation of India	8,00,000.00

Unsecured Loan :

The State Industrial and Investment Corporation of Maharashtra Ltd.	33,77,268.00
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Loan for Working Capital :

The Maharashtra State Co-operative Bank Ltd., Bombay. On hypothecation of yarn and cotton stock	1,59,56,319.55
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Total Loan Capital 3,23,98,887.55

Capital Gearing Ratio for 1980-81

=  $\frac{\text{Equity Share Capital + Reserves and Surplus}}{\text{Loan Capital}}$

=  $\frac{8,52,63,652.68}{3,23,98,887.55}$

= 2.65:1

Loan Capital for 1981-82

<b>Industrial Finance Corporation of India</b>	
<b>Fourth Expansion Plan</b>	<b>21,50,000.00</b>
<b>Industrial Development Bank of India</b>	
<b>Fourth expansion plan</b>	<b>21,00,000.00</b>
<b>Modernisation scheme</b>	<b>22,50,000.00</b>
<b>The Industrial Credit and Investment Corporation of India Ltd.</b>	
<b>Fourth expansion plan</b>	<b>80,000.00</b>
<b>Modernisation scheme</b>	<b>23,25,000.00</b>
<b>Life Insurance Corporation of India</b>	
<b>Fourth expansion plan</b>	<b>4,00,000.00</b>
<b>The Maharashtra State Co-operative Bank Ltd., Bombay</b>	
<b>Middle term loan for replacement and renovation scheme</b>	<b>1,66,75,000.00</b>
<b><u>Unsecured Loan :</u></b>	
<b>The State Industrial and Investment Corporation of Maharashtra Ltd.</b>	<b>40,51,268.00</b>
<b><u>Loan for working capital</u></b>	
<b>The Maharashtra State Co-operative Bank Ltd., Bombay - Hypothecation - on cotton and yarn stock</b>	<b>2,50,62,578.22</b>
<b>Mortgage</b>	<b>30,00,000.00</b>
<b>Clean cash credit</b>	<b>5,00,000.00</b>
<b>Total Loan Capital</b>	<b>5,85,93,846.22</b>

**Capital Gearing Ratio for 1981-82**

**Equity Capital + Reserves and Surplus**  
**Loan Capital**

**= 9,38,43,921.36**  
**= 5,85,93,846.22**

**= 1.60:1**

**Loan Capital for 1982-83**

**Secured Loan :**

<b>Industrial Finance Corporation of India</b>	<b>10,00,000.00</b>
<b>Fourth expansion Plan</b>	
<b>Industrial Development Bank of India</b>	
<b>Fourth expansion plan</b>	<b>12,80,000.00</b>
<b>Modernisation scheme</b>	<b>19,50,000.00</b>
<b>The Industrial Credit and Investment Corporation of India Ltd.</b>	
<b>Modernisation scheme</b>	<b>19,75,000.00</b>
<b>Life Insurance Corporation of India</b>	
<b>Fourth expansion plan</b>	<b>-</b>
<b>The Maharashtra State Co-operative Bank Ltd., Bombay</b>	
<b>Middle term loan for replacement and Renovation scheme</b>	<b>2,44,00,000.00</b>

**Unsecured Loan :**

<b>The State Industrial and Investment Corporation of Maharashtra Ltd.</b>	<b>43,98,268.00</b>
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Loan for Working Capital :

The Maharashtra State Co-operative Bank  
Ltd., Bombay

Hypothecation on yarn and cotton  
stock 2,71,31,720.73

Mortgage 30,00,000.00

Total Loan Capital 6,51,34,988.73

Capital Gearing Ratio for 1982-83

= Equity Share Capital + Reserves and Surplus  
Loan Capital

= 10,49,26,211.49  
= 6,51,34,988.73

= 1.61:1

Loan Capital for 1983-84

Secured Loan :

Industrial Development Bank of India

Fourth expansion plan 2,40,000.000

Modernisation scheme 16,50,000.00

The Industrial Credit and Investment  
Corporation of India Ltd. for  
Modernisation

16,50,000.00

The Maharashtra State Co-operative  
Bank Ltd., Bombay

Middle term loan replacement and  
Renovation scheme 3,22,30,000.00

Generating sets 16,00,000.00

**Unsecured Loan :**

**The State Industrial and Investment Corporation of Maharashtra Ltd.**

Loan for working capital	53,81,641.00
Hypothecation on cotton and yarn stock	3,26,18,075.69
Mortgage	30,00,000.00
Clearn cash credit	5,00,000.00
	<hr/>
<b>Total Loan Capital</b>	<b>7,88,69,716.69</b>

**Capital gearing Ratio for 1983-84**

**Equity Capital + Reserves and Surplus**  
**Loan Capital**

$$= \frac{11,84,62,498.22}{7,88,69,716.69}$$

$$= 1.50:1$$

**Loan Capital for 1984-85**

**Secured Loan :**

**Industrial Development Bank of India**

Modernisation scheme 13,50,000.00

**Industrial Credit and Investment Corporation of India Ltd.**

Modernisation scheme 13,50,000.00

**The Maharashtra State Co-operative Bank Ltd., Bombay**  
**Middle term loan**

Replacement and Renovation scheme 1,95,30,000.00

Generating sets 12,00,000.00

Unsecured Loan :

The State Industrial and Investment Corporation of Maharashtra Ltd. 59,55,460.00

Loan for Working Capital :

The Maharashtra State Co-operative Ltd., Bombay

Hypothecation on cotton stock	2,05,24,849.74
Yarn stock	68,30,000.00
Mortgage	35,00,000.00
Freeshipment cash credit	23,27,000.00
Clean cash credit	5,00,000.00

Total Loan Capital 3,30,67,309.74

Capital Gearing Ratio for 1984-85

Equity Capital + Reserves and Surplus  
Loan Capital

12,54,19,558.16  
= 3,30,67,309.74

= 3.79:1

For Shareholders Fund see chart of Shareholder's

Fund.

4.2 TOTAL INVESTMENT TO LONG TERM LIABILITIES :

$$= \frac{\text{Shareholders fund + Long-term Liability}}{\text{Long term Liabilities}}$$

Shareholders fund consists of share capital and Reserves and surplus. Reserves and surplus includes Reserve fund, Depreciation Fund, Development Rebate Reserve, Investment allowance reserve fund, capital redemption reserve fund, Dividend equalisation fund, common good fund, Reserve for bad and doubtful debt fund, building fund, profit and loss account credit balance, deduction of profit and loss account, Dr. balance.

Long term liability includes non-refundable deposits from members, secured loan taken from Industrial development Bank of India for fourth expansion plan and for modernisation scheme, The Industrial Credit and Investment Corporation of India Ltd. for modernisation scheme, The Maharashtra State Co-operative Bank Ltd., Bombay, middle term loan for replacement and Renovation Scheme and for generating sets. Unsecured loan from The State Industrial and Investment Corporation of Maharashtra Ltd., fixed deposits.

Calculation of Long-term Liability for 1980-81

Non refundable deposits from members	95,14,319.49
<u>Secured Loan</u>	89,10,000.00
	<hr/>
	1,84,24,319.49

IFCI	34,50,000.00	
IDBI		
i) 4th expansion scheme	29,00,000.00	
ii) Modernisation	25,50,000.00	
	<u>89,10,000.00</u>	
ICICI		41,65,000.00
i) 4th expansion plan	7,40,000.00	
ii) Modernisation	26,25,000.00	
LIC	8,00,000.00	
	<u>41,65,000.00</u>	
		1,84,24,319.49
Unsecured Loan from The State Industrial and Investment Corporation of Maharashtra Ltd.		33,77,268.00
		<u>2,18,01,587.49</u>
Fixed Deposit		-
Total Long-term Liability		<u>2,18,01,587.49</u>

Shareholders Fund + Long-term Liability  
Long term Liability

8,52,63,652.68 + 2,18,01,587.49  
2,18,01,587.49

10,77,65,240.17  
= 2,18,01,587.49

= 4.94:1

Total Long-term Liability 1981-82

Non-refundable deposits from members 95,14,319.49

Secured Loan :

a) IFCI - 4th expansion plan 21,50,000.00

b) IDBI

1) 4th expansion plan 21,00,000.00

ii) Modernisation scheme 22,50,000.00

c) ICICI

i) 4th expansion plan 80,000.00

ii) Modernisation scheme 23,25,000.00

d) LIC - 4th expansion plan 4,00,000.00

e) The Maharashtra State Co-operative Bank Ltd. - Replacement and Renovation scheme 1,66,75,000.00

Unsecured Loan :

The State Industrial and Investment Corporation of Maharashtra Ltd. 40,51,268.00

Fixed Deposit 7,45,000.00

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3,02,90,587.49

Total Investment to Long-term Liabilities

= Shareholders Fund + Long-term Liabilities  
Long-term Liabilities

= 9,38,43,921.36 + 3,02,90,587.49  
3,02,90,587.49

= 12,41,34,508.49  
3,02,90,587.49

= 4.10:1

Total long-term liabilities (1982-83)

Non refundable deposit from members 95,14,319.49

Secured Loan :

a) IFCI

4th expansion plan 10,00,000-00

b) IDBI

4th expansion plan 12,80,000-00

Modernisation 19,50,000-00  
Scheme

c) LIC 2,44,00,000-00

d) The Maharashtra  
State Co-operative  
Bank Ltd., Bombay

Unsecured Loan :

Investment Corpora- 43,98,268-00  
tion of India Ltd.

Fixed deposits 10,41,000-00 3,60,44,268.00

4,55,58,587.49

Total Investment to Long-term Liabilities

= Shareholder's Fund + Long-term Liabilities  
Long-term Liabilities

= 10,49,26,211.49 + 4,55,58,587.49  
4,55,58,587.49

= 15,04,84,798.98  
4,55,58,587.49

= 3.30:1

Total Long-term Liabilities 1983-84

Non refundable deposits from members 94,14,319.49

Secured Loan :

- i) Industrial Finance Corporation of India -
- ii) Industrial Development Bank of India
- 4th modernisation scheme 2,40,000.00
- Modernisation scheme 16,50,000.00
- iii) Industrial credit Investment Corporation of India, Ltd. Modernisation 16,50,000.00
- iv) The State Co-op. Bank Ltd., Bombay Middle term loan 3,22,30,000
- a) replacement and Renovation scheme
- b) Generating sets 16,00,000.00

Unsecured Loan :

The State Industrial and Investment Corporation of Maharashtra Ltd. 53,81,641.00

Fixed deposits 23,92,000.00

4,51,53,641.00

Total long-term Liabilities

5,46,67,960.49



**Shareholders Fund + Long term Liabilities**  
**Long term Liabilities**

=  $\frac{11,84,62,498.79 + 5,46,67,960.49}{5,46,67,960.49}$

=  $\frac{17,31,30,459.78}{5,46,67,960.49}$

= 3.17:1

**Total Long-term Liabilities 1984-85**

Non refundable deposits from members 1,12,66,440.00

**Secured Loan :**

i) Industrial Development Bank of India

Fourth expansion plan 13,50,000.00

Modernisation scheme

ii) The Industrial Credit and Instrument Corporation of India Ltd.

Modernisation scheme 13,50,000.00

iii) The Maharashtra State Co-operative Bank Ltd., Bombay - Middle term loan

a) Replacement and Renovation 1,95,50,000.00

b) Generating Sets 12,00,000.00

**Unsecured Loan :**

The State Industrial and Investment Corporation of Maharashtra Ltd. 59,55,460.00

Fixed Deposits 26,25,000.00

**Total Long-term Liability 4,32,76,900.00**

**Total Investment to long-term Liabilities**

**=  $\frac{\text{Shareholder's Fund + Long-term Liabilities}}{\text{Long-term Liability}}$**

**=  $\frac{12,54,19,558.16 + 4,32,76,900.00}{4,32,76,900.00}$**

**=  $\frac{16,86,96,458.16}{4,32,76,900.00}$**

**= 3.89:1**

**For shareholders fund see chart of Shareholder's**

**Fund.**

**4.3 RATIO OF CURRENT LIABILITIES  
TO PROPRIETORS FUND :**

$$= \frac{\text{Current Liabilities}}{\text{Shareholders Fund}}$$

Current liabilities includes refundable deposits from members. The Maharashtra State Co-operative Bank Ltd., Bombay Hypothecated cotton and yarn stock, mortgage, clean cash credit, freeshipment cash credit, Deposits from contractors, yarn and others, current liability includes s. crs., expenses, education fund subscription, others sales tax, Interest, provision for income Dividend Gratuity provision.

Shareholders fund includes shares capital and reserves and surplus. Reserves and surplus consists of Reserve fund, Depreciation fund, Development Rebate Reserve, Investment Allowance Reserve Fund, Capital Redemption Reserve Fund, Dividend Equalisation fund, common good fund, reserve for bad and doubtful debt fund, building fund, profit and loss account.

Ratio of current liabilities to proprietors fund for  
1980-81

$$= \frac{\text{Current Liability}}{\text{Shareholders Fund}}$$

$$= \frac{4,32,50,221.68}{8,59,63,652.68}$$

$$= 0.51$$

**For current liabilities and shareholders fund see  
chart.**

Ratio of Current Liabilities to  
Proprietors Fund 1981-82

= Current Liability  
= Proprietors Fund

= 5,45,57,868.98  
= 9,38,43,121.36

= 0.59.

Ratio of Current Liabilities  
to Proprietors Fund 1982-83

= Current Liability  
= Proprietors Fund

= 6,12,29,650.36  
= 10,49,26,211.49

= 0.58.

Ratio of Current Liabilities  
to Proprietors Fund 1983-84

= Current Liability  
= Proprietors Fund

= 6,25,41,390.59  
= 11,84,62,498.29

= 0.53

Ratio of Current Liabilities  
to Proprietors Fund 1984-85

= Current Liability  
= Proprietors Fund

= 6,47,48,330.05  
= 12,54,19,558.16

= 0.52.

#### 4.5 PROFITABILITY RATIOS :

##### a) General Profitability

##### 1) Operating Ratio :

Operating ratio is the relationship of operating cost to net sales operating cost = cost of goods sold + operating expenses. Operating expenses consists of (i) Manufacturing expenses, (ii) Selling and distribution expenses, (iii) Administrative expenses, (iv) factory overheads manufacturing expenses includes workers wages, supervision staff salary, Gratuity, Provident Fund contribution (supervision and workers), electricity expenditure, coal and fuel expenditure, stores expenditure, packing material, yarn bleaching and mercering expenses, machinery repairs and maintenance, cotton cess.

Yarn selling and distribution expenses includes yarn selling and distribution expenses, Advertisement - yarn travelling and coolie expenses brokerage on yarn selling and commission yarn cess, yarn godown rent.

Administrative expenditure - office staff payment, provident fund contribution of office staff, travelling expenses, travelling expenses of board of directors, postage telegram and telephone, Bank commission, printing and stationery, Donations, guest house expenses, general charges, Rent, Rates and taxes, gardening, honourarium of board of directors, auditors.

Factory overheads includes insurance, water supply, building repair and maintenance, vehicle repairing and maintenance sanitation, lighting, legal fee, employees state insurance, workers welfare expenses.

**Cost of goods sold for five years**

**Sales - G.P. = Cost of goods sold**

Year	Sales	G.P.	Cost of goods sold
1980-81	11,53,76,919.61	1,80,68,839.58	9,73,08,080.61
1981-82	13,60,34,235.67	2,00,02,120.69	11,60,32,114.78
1982-83	14,05,74,717.59	2,74,95,957.90	11,58,78,759.69
1983-84	14,19,36,395.04	2,99,40,947.89	11,19,95,447.15
1984-85	19,04,39,964.88	2,45,87,455.22	16,58,52,509.66

**Operating Expenses 1980-81**

<u>Particulars</u>	<u>Amount</u>
1) Workers Wages	1,57,49,334.99
2) Supervision staff payment	8,25,360.63
3) Gratuity	2,24,429.82
4) Provident Fund Contribution	9,67,228.85
5) Electricity	66,73,224.40
6) Coal	1,05,848.41
7) Stores	52,40,043.54
8) Machinery Repair and maintenance	13,55,828.01
9) Yarn bleaching	97,468.21

<b>Particulars</b>	<b>Amount</b>
10) Cotton see	16,829.34
11) Yarn selling and distribution	16,478.00
12) Advertisement	1,02,323.10
13) Yarn transport and coolie	54,446.10
14) Brokerage on yarn selling and commission	2,61,031.11
15) Yarn see	42,589.60
16) Yarn godown rent	20,600.00
17) Office Staff Payment	17,16,350.93
18) Provident Fund contribution	86,885.90
19) Travelling expenses	99,809.32
20) Travelling expenses (Board of Directors)	22,885.56
21) Postage, Telegram, Telephone	1,68,222.96
22) Bank Commission	37,191.40
23) Printing and Stationery	1,34,130.32
24) Donation	10,000.00
25) Guest House	43,270.57
26) General charges	1,24,026.79
27) Rent Rates taxes	79,177.73
28) Gardening	99,880.36
29) Sales Tax	89,947.00
30) Honourarium Board of Directors	1,880.00
31) Audit Fee	30,000.00
32) Insurance	2,98,451.55
33) Building repair and maintenance	2,96,184.65
34) Water supply	1,20,754.40

<u>Particulars</u>	<u>Amount</u>
35) Vehicles and maintenance	2,16,198.36
36) Sanitation	40,384.22
37) Lighting	25,076.66
38) Legal fee	92,917.00
39) Employees State Insurance	5,59,382.09
40) Workers Welfare expenses	6,65,849.32
<b>Total operating expenses (1980-81)</b>	<b>3,68,11,621.20</b>

**Operating Ratio**

$$= \frac{\text{Cost of goods sold} + \text{Operating expenses}}{\text{Net Sales}} \times 100$$

$$= \frac{9,73,08,080.61 + 3,68,11,621.20}{11,53,76,919.61} \times 100$$

$$= \frac{13,41,19,701.81}{11,53,76,919.61} \times 100$$

$$= 116.30\%$$

**Operating Expenses 1981-82**

<u>Particulars</u>	<u>Amount</u>
1) Workers wages	1,59,31,431.30
2) Supervision Staff Payment	7,06,570.87
3) Gratuity	4,45,201.27
4) Provident Fund Contribution	11,65,078.50
5) Electricity	93,21,175.04
6) Coal and Fuel	2,52,070.33



<u>Particulars</u>	<u>Amount</u>
7) Stores	32,26,877.56
8) Machinery Repair and maintenance	20,43,650.83
9) Yarn bleaching	2,33,362.33
10) Cotton Ses	17,108.37
11) Yarn selling and distribution	16,217.50
12) Advertisement	96,097.05
13) Yarn transport and coalle	38,330.00
14) Brokerage on yarn selling and commission	4,16,104.67
15) Yarn ses	1,86,587.85
16) Yarn godown rent	27,266.67
17) Office Staff payment	16,80,525.57
18) Provident Fund Contribution	1,04,129.00
19) Travelling expenses	1,22,087.57
20) Travelling expenses (Board of Directors)	47,060.00
21) Postage, telegram, Telephone	2,10,370.52
22) Bank Commission	33,705.78
23) Printing and Stationery	1,43,251.93
24) Donation	-
25) Guest House	59,648.72
26) General Charges	1,30,808.98
27) Rent Rates Taxes	70,781.03
28) Gardening	1,57,701.32
29) Sales tax	-
30) Honorarium (Board of Directors)	1,660.00

<u>Particulars</u>	<u>Amount</u>
31) Audit Fee	30,000.00
32) Insurance	3,78,632.94
33) Packing Material	23,87,859.13
34) Export Promotion expenses	86,041.80
35) Water supply	1,32,011.11
36) Building repair and maintenance	1,52,063.63
37) Vehicle repair and maintenance	3,21,475.89
38) Sanitation	36,868.86
39) Lighting	51,901.47
40) Legal fee	54,870.00
41) Employees State Insurance	7,12,287.95
42) Workers Welfare expenses	4,05,410.19
	<hr/>
Total operating expenses (1981-82)	4,16,34,271.47

#### Operating Ratio

$$\begin{aligned}
 &= \frac{\text{Cost of goods sold} + \text{Operating expenses}}{\text{Net Sales}} \times 100 \\
 &= \frac{11,60,32,114.78 + 4,16,34,271.47}{13,60,34,235.67} \times 100 \\
 &= 115.88\%
 \end{aligned}$$

#### Operating Expenses 1982-83

<u>Particulars</u>	<u>Amount</u>
1) Workers wages	1,84,19,461.55
2) Supervision staff payment	10,33,503.41

<u>Particulars</u>	<u>Amount</u>
3) Cartuity	5,30,663.61
4) Provident Fund Contribution	13,53,068.40
5) Electricity	1,13,37,322.78
6) Coal	3,10,173.92
7) Stores	39,20,848.22
8) Machinery Repair and Maintenance	22,06,052.06
9) Yarn Bleaching and Mercerising	2,39,813.67
10) Cotton ses	17,792.04
11) Yarn selling and distribution	17,063.15
12) Advertisement	84,594.50
13) Yarn transport and coolie	1,278.30
14) Brokerage on yarn selling and commission	6,67,436.23
15) Yarn ses	62,509.64
16) Yarn godown rent	30,000.00
17) Office Staff Payment	20,62,187.46
18) Provident Fund Contribution	1,49,635.55
19) Travelling expenses	1,02,921.30
20) Travelling expenses (Board of Directors)	23,132.75
21) Postage, Telegram, Telephone	2,39,708.26
22) Bank Commission	35,132.92
23) Printing and Stationery	1,55,721.28
24) Donation	-
25) Guest House	1,05,300.95
26) General Charges	1,78,214.34
27) Rent Rates taxes	79,058.62

<u>Particulars</u>	<u>Amount</u>
28) Gardening	32,908.95
29) Sales tax	-
30) Honorarium (Board of Directors)	-
31) Audit Fee	30,000.00
32) Insurance	4,27,709.82
33) Packing material	24,34,789.98
34) Board of Directors meeting fee	4,150.00
35) Chief Minister Relief Fund	2,00,000.00
36) Water Supply	96,000.37
37) Building repair and maintenance	1,94,899.21
38) Vehicle repair and maintenance	3,74,566.61
39) Sanitation	26,795.66
40) Lighting	66,395.19
41) Legal Fee	45,694.00
42) Employees State Insurance	7,93,164.50
43) Workers welfare expenses	5,02,407.33
<b>Total operating expenses</b>	<b>4,82,92,066.42</b>

**Operating Ratio**

$$= \frac{\text{Cost of goods sold} + \text{Operating expenses}}{\text{Net Sales}} \times 100$$

$$= \frac{11,58,78,759.69 + 4,82,92,066.52}{14,05,74,717.59} \times 100$$

$$= \frac{16,41,70,826.21}{14,05,74,717.59} \times 100$$

$$= 116.79\%$$

Operating Expenses 1983-84

<u>Particulars</u>	<u>Amount</u>
1) Workers Wages	1,99,05,850.94
2) Supervision Staff Payment	10,69,316.23
3) Gratuity	5,67,723.84
4) Provident Fund Contribution	15,40,857.35
5) Electricity	1,34,79,980.58
6) Coal and Fuel	3,27,115.20
7) Stores	19,83,464.27
8) Machinery Repair and Maintenance	13,86,492.62
9) Yarn Bleaching	1,77,386.74
10) Cotton ses	19,610.88
11) Yarn selling and distribution	26,941.80
12) Advertisement	68,591.00
13) Yarn Transport and coolie	217.00
14) Brokerage on yarn selling and commission	4,00,545.39
15) Yarn ses	68,706.41
16) Yarn godown rent	60,000.00
17) Office Staff Payment	24,04,900.98
18) Provident Fund Contribution	1,68,474.25
19) Travelling expenses	98,812.01
20) Travelling expenses (Board of Directors)	22,185.10
21) Postage, Telegram, Telephone	2,32,986.21
22) Bank Commission	35,762.74
23) Printing and Stationery	1,85,241.06

<u>Particulars</u>	<u>Amount</u>
24) Donation	-
25) Guest House	1,36,061.63
26) General charges	2,83,330.11
27) Rent Rates Taxes	59,668.82
28) Gardening	34,008.01
29) Sales Tax	-
30) Honorarium (Board of Directors)	-
31) Audit Fee	30,000.00
32) Insurance	5,60,386.06
33) Packing material	25,92,832.70
34) Board of Directors meeting fee	4,200.00
35) Water supply	1,08,331.63
36) Building repair and maintenance	2,14,714.43
37) Vehicle Diesel and petrol	2,32,261.73
38) Vehicle maintenance and repair	1,70,645.53
39) Sanitation	43,800.13
40) Lighting	56,721.94
41) Legal fee	35,125.00
42) Employees State Insurance	8,04,909.52
43) Worker's Welfare expenses	7,17,372.58
<b>Total operating expenses</b>	<b>5,03,15,532.42</b>

### Operating Ratio

$$= \frac{\text{Operating expenses} + \text{Cost of goods sold}}{\text{Net Sales}} \times 100$$

$$= \frac{11,19,95,447.15 + 5,01,15,532.42}{14,19,36,395.04} \times 100$$

$$= \frac{16,23,10,979.57}{14,19,36,395.04} \times 100$$

$$= 114.37\%$$

### Operating Expenses 1984-85

<u>Particulars</u>	<u>Amount</u>
1) Workers Wages	2,10,62,147.41
2) Supervision Staff Payment	11,74,242.05
3) Gratuity	7,91,792.97
4) Provident Fund Contribution	15,84,436.00
5) Electricity	1,60,56,616.03
6) Coal and Fuel	4,71,283.80
7) Stores	25,23,102.70
8) Packing material	32,83,584.51
9) Yarn bleaching and mercerising	1,83,928.08
10) Machinery Repairs and maintenance	23,26,857.18
11) Cotton Goss	20,747.52
12) Yarn selling and distribution	49,123.30
13) Advertisement	83,998.80
14) Yarn transport	17,595.75
15) Brokerage and Commission	3,77,247.77

<u>Particulars</u>	<u>Amount</u>
16) Yarn godown rent	29,666.67
17) Yarn cess	80,532.57
18) Office staff payment	26,69,237.81
19) Provident Fund Contribution	1,83,238.00
20) Travelling expenses	1,12,091.75
21) Travelling Board of Directors	21,744.75
22) Postage, Telephone, Telex and Teleprinter	2,72,490.37
23) Bank Commission	32,544.16
24) Printing and Stationery	2,86,751.89
25) Guest House	1,30,368.47
26) General charges	2,02,085.87
27) Gardening	24,929.64
28) Rent, Rates and Taxes	89,217.39
29) Board of Directors meeting fee	4,290.00
30) Audit Fee	50,000.00
31) Chief Minister Relief Fund	25,000.00
32) Additional Tax on Sales Tax	1,04,719.00
33) Insurance	6,28,922.52
34) Water Supply	1,28,513.21
35) Building Repairing and maintenance	1,75,372.48
36) Vehicle Petrol and Diesel	2,54,230.86
37) Vehicle Repairing expenses	1,62,925.50
38) Sanitation	45,842.04



<u>Particulars</u>	<u>Amount</u>
39) Lighting	1,04,128.16
40) Legal Fee	49,725.00
41) Employees State Insurance	8,64,505.18
42) Workers Welfare Expenses	7,16,525.55
	<hr/>
Total operating expenses (1984-85)	5,74,56,002.37

**Operating Ratio**

$$= \frac{\text{Cost of goods sold} + \text{Operating expenses}}{\text{Net Sales}} \times 100$$

$$= \frac{16,58,52,502.66 + 5,74,56,002.37}{19,04,39,964.88} \times 100$$

$$= \frac{22,33,08,512.03}{19,04,39,964.88} \times 100$$

$$= 117.27\%$$

**Expenses Ratio** : Formula for calculating expenses ratio

is =  $\frac{\text{particular expense}}{\text{Net Sales}} \times 100$  particular expenses includes :

- 1) Manufacturing expenses
- 2) Selling and distribution expenses
- 3) Factory overheads
- 4) Administrative expenses.

1) Manufacturing expenses ratio :

$$= \frac{\text{Manufacturing expenses}}{\text{Net Sales}} \times 100$$

Machinery repair and maintenance, yarns bleaching and necessary, cotton cess

Manufacturing expenses are made up of workers wages, supervisory staff, payment, gratuity, provident fund contribution, supervisory staff and workers, electricity, fuel and coal expenses, stores expenses, packing material.

Manufacturing expenses - 1980-81

Workers wages	1, 57, 49, 334.99
Supervisory Staff Payment	8, 25, 360.63
Gratuity	2, 24, 429.82
Provident Fund contribution	9, 67, 228.85
Electricity	66, 73, 224.40
Fuel and Coal expenses	1, 05, 848.41
Stores expenses	52, 40, 043.54
Machinery repair and maintenance	13, 55, 828.01
Yarn bleaching and mercerising	97, 468.21
Cotton Cess	16, 829.34

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Total Manufacturing expenses 3, 12, 55, 596.20

**Manufacturing expenses ratio**

$$= \frac{\text{Manufacturing expenses}}{\text{Net Sales}} \times 100$$

$$= \frac{3,12,55,596.20}{11,53,76,919.61} \times 100$$

$$= 27.12\%$$

**Manufacturing expenses 1981-82**

Workers Wages	1,59,31,431.30
Supervision Staff payment	7,06,570.87
Gratuity	4,45,201.21
Provident Fund Contribution	11,65,078.50
Electricity	93,21,175.04
Coal and Fuel expenses	2,52,070.33
Stores expenses	32,26,877.56
Packing material	23,87,849.13
Machinery repairs and maintenance	20,43,650.83
Cotton Cass	17,108.37
Yarn bleaching and Mercerizing	2,33,362.33
<b>Total Manufacturing expenses</b>	<b>3,57,30,375.47</b>

**Manufacturing expenses ratio**

$$= \frac{\text{Manufacturing expenses}}{\text{Net Sales}} \times 100$$

$$= \frac{3,57,30,375.47}{13,60,34,235.47} \times 100$$

$$= 26.27\%$$

Manufacturing expenses 1982-83

Workers Wages	1,84,19,451.55
Supervision Staff Payment	10,33,503.41
Gratuity	5,30,663.61
Provident Fund contribution	13,53,068.40
Electricity	1,13,37,322.78
Coal and Fuel	3,10,173.92
Stores expenses	39,20,848.22
Packing material	24,34,789.98
Yarn bleaching and mercerising expenses	23,39,813.67
Machinery repairs and maintenance	22,06,052.06
Cotton Cess	17,792.04
<b>Total manufacturing expenses</b>	<b>4,18,03,489.64</b>

**Manufacturing Expenses Ratio**

$$= \frac{\text{Manufacturing expenses}}{\text{Sales}} \times 100$$

$$= \frac{4,18,03,489.64}{14,05,74,717.59} \times 100$$

$$= 29.72\%$$

Manufacturing expenses 1983-84

Workers Wages	1,99,05,850.94
Supervision staff payment	10,69,316.23
Gratuity	5,67,723.84
Provident Fund Contribution	15,40,857.35
Electricity	1,34,79,980.58
Coal and Fuel expenses	3,27,115.20
Stores expenses	19,83,464.27
Packing material	25,92,832.70
Yarn bleaching and mercising	1,77,386.74
Machinery Repairs and maintenance	13,86,492.62
Cotton Gess	19,410.88
	<hr/>
	4,30,50,631.35

Manufacturing Expenses Ratio

$$= \frac{\text{Manufacturing expenses}}{\text{Sales}} \times 100$$

$$= \frac{4,30,50,631.35}{14,19,36,395.04} \times 100$$

$$= 30.37\%$$

Manufacturing expenses 1984-85

Workers Wages	2,10,62,147.41
Supervision staff payment	11,74,242.05
Gratuity	7,91,792.97
Provident Fund Contribution	15,84,436.00
Electricity	1,60,56,616.03
Coal and fuel expenses	4,71,283.80
Stores expenses	25,23,102.70
Packing material	32,83,254.51
Yarn bleaching and mercerising	1,83,928.08
Machinery repairs and maintenance	23,26,857.18
Cotton cess	20,747.52
	4,94,78,408.25

Manufacturing Expenses Ratio

$$\begin{aligned} &= \frac{\text{Manufacturing expenses}}{\text{Sales}} \times 100 \\ &= \frac{4,94,78,308.25}{19,04,39,964.88} \times 100 \\ &= 25.99\% \end{aligned}$$

2) Selling and distribution expenses : This ratio is calculated by the following formula :

$$\frac{\text{Selling and distribution expenses}}{\text{Sales}} \times 100$$

Selling and distribution expenses consists of yarn selling and distribution expenses, Advertisement, Export promotion expenses, yarn transport and coolie expenses, brokerage on yarn selling and commission, yarn godown rent, yarn cess.

Total selling and distribution expenses 1980-81

Yarn selling and distribution expenses	16,478.00
Advertisement	1,02,323.10
Yarns transport and coolie	54,446.10
Brokerage on yarn selling and commission	2,61,031.11
Yarn cess	42,589.60
Yarn godown rent	20,600.00
	<hr/>
Total selling and distribution expenses	4,97,467.91

Selling and distribution expenses ratio

$$= \frac{\text{Selling and distribution expenses}}{\text{Sales}} \times 100$$

$$= \frac{4,97,467.91}{11,53,76,919.61} \times 100$$

$$= .43\%$$

Selling and distribution expenses ratio 1981-82

Yarn selling and distribution expenses	16,217.80
Export promotion expenses	86,039.80
Advertisement	96,097.05

Yarn transport and coolie	38,330.00
Brokerage on yarn selling and Commission	4,16,104.67
Yarn cess	1,86,587.85
Yarn godown rent	27,266.67
	<u>8,66,643.54</u>

Selling and distribution expenses x 100  
Sales

$$= \frac{8,66,643.54}{13,60,34,235.87} \times 100$$

$$= .64\%$$

Selling and distribution expenses ratio 1982-83

Yarn selling and distribution expenses	17,063.15
Yarn transport	1,278.30
Advertisement	84,594.50
Brokerage on yarn selling and Commission	3,67,436.23
Yarn godown rent	30,000.00
Yarn cess	62,509.64
	<u>5,62,881.82</u>

Selling and distribution expenses x 100  
Sales

$$= \frac{5,62,881.82}{14,05,74,717.59} \times 100$$

$$= .40\%$$



Selling and distribution expenses ratio 1983-84

Yarn selling and distribution expenses	26,941.80
Advertisement	68,591.00
Yarn transport	217.00
Brokerage on yarn selling and commission	4,00,545.39
Yarn godown rent	60,000.00
Yarn cess	68,706.41
	<u>6,25,001.60</u>

Selling and distribution expenses  
Sales x 100

$$= \frac{6,25,001.60}{14,19,36,395.04} \times 100$$

= 0.44%

Selling and distribution expenses ratio 1984-85

Yarn selling and distribution expenses	49,123.30
Advertisement	83,998.80
Yarn transport	17,595.75
Brokerage on yarn selling and commission	3,77,247.77
Yarn godown rent	29,666.67
Yarn cess	80,532.57
	<u>6,38,164.86</u>

Selling and distribution expenses  
Sales x 100

$$= \frac{6,38,164.86}{19,04,39,964.88} \times 100$$

= 0.34%

3) Factory Overheads Ratio :

This ratio calculated from the following formula :

$$\frac{\text{Factory overheads}}{\text{Sales}} \times 100$$

Factory overheads expenses consists of Insurance, Water supply, Building repair and maintenance, vehicles repair and maintenance, sanitation, lighting, legal fee, employees State Insurance workers welfare expenses, vehicle petrol and diesel expenses.

Factory Overheads for 1980-81

Insurance	2,98,451.55
Water supply	1,20,754.40
Building repair and maintenance	2,96,184.65
Vehicles repair and maintenance	2,16,198.36
Sanitation	40,384.22
Lighting	25,076.66
Legal Fee	92,917.00
Employees State Insurance	5,59,382.09
Workers Welfare Expense	6,65,849.32
<b>Total Factory Overheads</b>	<b>23,15,198.25</b>

$$\frac{\text{Factory Overheads expenses}}{\text{Sales}} \times 100$$

$$= \frac{23,15,198.25}{11,53,76,919.61} \times 100$$

$$= 2\% - 2.01\%$$

Factory Overheads for 1981-82

Insurance	3,78,632.94
Water Supply	1,32,011.11
Building repair and maintenance	1,52,063.63
Vehicles repair and maintenance	3,21,475.89
Sanitation	36,868.86
Lighting	51,901.47
Legal fee	54,870.00
Employees State Insurance	7,12,287.95
Workers Welfare expenses	4,05,410.19
	<u>22,45,522.04</u>

Factory Overheads  
Sales x 100

$$= \frac{22,45,522.04}{13,60,34,235.47} \times 100$$

= 1.65%

Factory Overheads for 1982-83

Insurance	4,27,709.82
Water Supply	96,000.37
Building repair and maintenance	1,94,889.20
Vehicle repair and maintenance	3,74,566.61
Sanitation	26,795.66
Lighting	66,395.19
Legal Fee	45,694.00
Employees State Insurance	7,93,164.50
Workers Welfare expenses	5,02,407.33
Total Factory Overheads	<u>25,27,622.68</u>

Factory Overheads x 100  
Sales

=  $\frac{25,27,622.68}{14,05,74,717.59} \times 100$

= 1.80%

Factory Overheads for 1983-84

Insurance	5,60,386.06
Water Supply	1,08,331.63
Building repair and maintenance	2,14,714.43
Vehicle petrol and diesel expenses	2,32,261.73
Vehicle repair expenses	1,70,645.53
Sanitation	43,800.13
Lighting	56,721.94
Legal fee	35,125.00
Employees State Insurance	8,04,909.52
Workers Welfare Expenses	7,17,372.58
	<u>29,44,268.55</u>

Factory Overhead expenses Ratio

=  $\frac{\text{Factory Overheads}}{\text{Sales}} \times 100$

=  $\frac{29,44,268.55}{14,19,36,395.04} \times 100$

= 2.07%

Factory Overhead Expenses Ratio for 1984-85

Insurance	6,28,922.52
Water Supply	1,28,513.21
Building repair and maintenance	1,75,372.48
Vehicle Petrol and diesel expenses	2,54,230.86
Vehicle repair expenses	1,62,925.50
Sanitation	45,842.04
Lighting	1,04,128.16
Legal fee	49,725.00
Employees State Insurance	8,64,505.18
Worker's Welfare expenses	7,16,525.55
<b>Total Overhead expenses</b>	<b>31,30,690.50</b>

**Factory Overhead expenses Ratio**

$$= \frac{\text{Factory overheads}}{\text{Sales}} \times 100$$

$$= \frac{31,30,690.50}{19,04,39,964.88} \times 100$$

$$= 1.64\%$$

Administrative Expenses Ratio :

Administrative expenses consists of office staff payment, provident fund contribution, travelling expenses, travelling expenses of Board of Directors, postage, telegram and telephone, Bank commission, printing and stationery, Donation, general charges, Rent, Rates, Taxes, gardening, sales tax, honourarium of Board of Directors, audit fee,

Administrative expenses Ratio =  $\frac{\text{Administrative expenses}}{\text{Sales}} \times 100$

Administrative Expenses 1980-81


Office Staff Payment	17,16,250.93
Provident Fund contribution	86,885.90
Travelling expenses	99,609.32
Travelling expenses Board of Directors	22,885.56
Postage, Telegram, Telephone	1,68,222.96
Bank Commission	37,191.40
Printing and Stationery	1,34,130.32
Donation	10,000.00
Guest House charges	43,270.57
General Charges	1,24,026.79
Rent, Rates and Taxes	79,177.73
Gardening	99,880.36
Sales Tax	89,947.00
Honourarium to Board of Directors	1,880.00
Audit Fee	30,000.00
Total Administrative expenses	<u>27,43,358.84</u>

Administrative Expenses  $\times 100$   
Sales

=  $\frac{27,43,358.84}{11,53,76,919.61} \times 100$

= 2.38%.

Administrative Expenses 1981-82

Office Staff Payment	16,80,525.57
Provident Fund Contribution	1,04,129.00
Travelling expenses	1,22,087.57
Board of Directors expenses	47,060.00
Postage, Telephone, Telex, Teleprinter	2,10,370.52
Bank Commission	33,705.78
Printing and Stationery	1,43,251.93
Guest House charges	59,648.72
General Charges	1,30,808.98
Rent, Rates and Taxes	70,781.03
Gardening	1,57,701.32
Sales Tax	-
Honourarium to Board of Directors	1,660.00
Audit Fee	30,000.00
 Total Administrative expenses	<u>27,91,730.42</u>

$\frac{\text{Administrative expenses}}{\text{Sales}} \times 100$

$$= \frac{27,91,730.42}{13,60,34,235.47} \times 100$$

= 2.05%

Administrative Expenses 1982-83

Staff Payment Office	20,62,187.46
Provident Fund Contribution (Office staff)	1,49,635.55
Travelling expenses	1,02,921.30
Board of Directors Travelling expenses	23,132.75
Postage, Telephone, Telex, Teleprinter	2,39,708.26
Bank Commission	35,132.92
Printing and Stationery	1,55,721.28
Guest House Charges	1,05,300.95
General Charges	1,78,214.34
Gardening	32,908.95
Rent, Rates taxes	79,058.62
Audit Fee	30,000.00
Chief Ministers Relief Fund	2,00,000.00
✓ Total Administrative expenses	<u>33,98,072.38</u>

Administrative Expenses Ratio

$$= \frac{\text{Administrative expenses}}{\text{Sales}} \times 100$$

$$= \frac{33,98,072.38}{14,05,74,717.59} \times 100$$

$$= 2.42\%$$



Administrative Expenses 1983-84

Office Staff Payment	24,04,900.98
Provident Fund Contribution	1,68,474.25
Travelling Expenses	98,812.01
Board of Directors	22,185.10
Postage, Telephone, Telex Teleprinter	2,32,986.21
Bank Commission	35,762.74
Printing and Stationery	1,85,241.06
Guest House Expenses	1,36,061.63
General Charges	2,83,330.11
Gardening	34,008.01
Rent, Rates, Taxes	59,668.82
Board of Directors meeting fee	4,200.00
Audit Fee	30,000.00
<b>Total Administrative expenses</b>	<b><u>36,95,630.92</u></b>

Administrative expenses Ratio

$$= \frac{\text{Administrative expenses}}{\text{Sales}} \times 100$$

$$= \frac{36,95,630.92}{14,19,36,395.04} \times 100$$

$$= 2.60\%$$

Administrative expenses 1984-85

Office Staff Payment	26,69,237.81
Provident Fund Contribution (Office staff)	1,83,238.00
Travelling expenses	1,12,091.75
Travelling expenses Board of Directors	21,774.75
Postage, Telephone, Telex Teleprinter	2,72,490.37
Bank Commission	32,544.16
Printing and Stationery	2,86,751.89
Guest House Charges	1,30,368.47
General Charges	2,02,084.87
Gardening	24,929.64
Rent, Rates Taxes	89,217.39
Meeting Fee Board of Directors	4,290.00
Audit Fee	50,000.00
Chief Minister Relief Fund	25,000.00
Additional Tax on Sales Tax	1,04,719.00
	<hr/>
Total administrative expenses	42,08,739.10

Administrative expenses Ratio

$$= \frac{\text{Administrative expenses}}{\text{Sales}} \times 100$$

$$= \frac{42,08,739.10}{19,04,39,964.88} \times 100$$

$$= 2.21\%$$

Operating Profit Ratio :

$$= \frac{\text{Operating Profit}}{\text{Net Sales}} \times 100$$

Operating Profit - Net Profit + Income Tax + Interest  
Paid - interest received - Miscellaneous receipts - dividend  
received - interest and carrying charges received - other  
receipts + profit on sale of fixed asset - refund of sales tax -  
other receipts share dividend - refund of income tax.

Operating Profit Ratio 1980-81

Operating Profit

Net Profit 5,07,190.37

+ Income Tax -

+ Interest 55,54,851.19

60,62,041.56

Less -

Interest received 9,42,207.39

Other receipts 4,42,975.40

Share dividend 9,237.60

13,94,420.39

46,67,621.17

Operating Profit Ratio

$$= \frac{\text{Operating profit}}{\text{Net Sales}} \times 100$$

$$= \frac{46,67,621.17}{11,53,76,919.61} \times 100$$

$$= 4.04\%$$

Operating Profit Ratio for 1981-82

Operating Profit

Net Loss -13,66,075.42

+ Interest 84,63,734.82

70,97,659.40

Less -

Interest 6,78,422.82

Other Receipts 7,15,212.01

Share Dividend 38,38,385.34

Refund of income Tax 20,078.00

Refund of Sales Tax 4,81,328.00

19,15,426.17

51,82,233.23

Operating Profit x 100  
Sales

=  $\frac{51,82,233.23}{13,60,34,235.47} \times 100$

= 3.81%

Operating Profit Ratio for 1982-83

Operating Profit

Net Loss -11,28,240.62

+Interest 96,21,094.19

84,92,853.57

Less -

Interest	11,19,803.75	
Miscellaneous	15,58,337.48	
Dividend	52,730.00	
Sales Tax	38,589.50	
	<hr/>	27,69,480.73
		<u>5.72</u>
		57,23,392.84

Operating Profit x 100  
Sales

=  $\frac{57,23,392.84}{14,05,74,717.59} \times 100$

= 4.07%.

Operating Profit Ratio for 1983-84

Operating Profit	
Net Loss	-62,62,347.27
+Interest	1,19,60,216.79
	<hr/>
	56,97,869.52

Less -

Interest and Carrying Charges	8,87,933.98	
Other Income	5,71,630.93	
Profit on Sale of asset	27,55,805.99	
Dividend	58,854.20	
	<hr/>	42,23,644.42
Operating Profit		<hr/>
		14,23,644.42

Operating Profit  
Sales x 100

=  $\frac{14,23,644.42}{14,19,36,395.04} \times 100$

= 1.00% i.e. 1%

Operating Profit Ratio 1984-85

Operating Profit	
Less Loss	-91,03,801.46
+Interest	1,33,43,540.33
+Income Tax	3,28,316.00
	<hr/>
	45,68,054.87

Less -

Interest	1,07,787.59	
Carrying charges	23,03,035.41	
Other receipts	12,39,541.35	
Profit on sale of asset	13,59,378.47	
Dividend	71,895.20	
Sales tax	-	
	<hr/>	
		52,50,666.21
Total operating loss		<hr/>
		- 6,82,611.34

=  $\frac{-6,82,611.34}{19,04,39,964.88} \times 100$

= -.36%

G.P. Ratio :

Sales and Gross Profit for 1980-81

Year	Particulars	Net Sales
1980-81	1,80,68,839.58	11,53,76,919.61
1981-82	2,00,02,120.69	13,60,34,235.67
1982-83	2,47,95,957.90	14,05,74,717.59
1983-84	2,99,40,947.89	14,19,36,395.04
1984-85	2,45,87,455.22	19,04,39,964.88

G.P. Ratio :

$$= \frac{\text{G.P.}}{\text{Net Sales}} \times 100$$

1980-81	=	$\frac{1,80,68,839.58}{11,53,76,919.61}$	x 100	=	15.66%
1981-82	=	$\frac{2,00,02,120.69}{13,60,34,235.67}$	x 100	=	14.70%
1982-83	=	$\frac{2,47,95,957.90}{14,05,74,717.59}$	x 100	=	17.64%
1983-84	=	$\frac{2,99,40,947.89}{14,19,36,395.04}$	x 100	=	12.09%
1984-85	=	$\frac{2,45,87,455.22}{19,04,39,964.88}$	x 100	=	12.91%

N.P. Ratio :

$$= \frac{\text{N.P.}}{\text{Sales}} \times 100$$

**Net Profit and Sales for 1980-81 - 1984-85**

Years	Sales	Net Profit	Net Loss
1980-81	11,53,76,919.61	5,07,190.37	-
1981-82	13,60,34,235.67	-	13,66,075.42
1982-83	14,05,74,717.59	-	11,28,240.62
1983-84	14,19,36,395.04	-	62,62,347.27
1984-85	19,04,39,964.88	-	91,03,801.46

1980-81	$= \frac{5,07,190.37}{11,53,76,919.61} \times 100$	$= .44\%$
1981-82	$= \frac{-13,66,075.42}{13,60,34,235.67} \times 100$	$= -1\%$
1982-83	$= \frac{-11,28,240.62}{14,05,74,717.59} \times 100$	$= -.80\%$
1983-84	$= \frac{-62,62,347.27}{14,19,36,395.04} \times 100$	$= -4.41\%$
1984-85	$= \frac{-91,03,801.46}{19,04,39,964.88} \times 100$	$= -4.78\%$



**OVERALL PROFITABILITY :**

**Return on Shareholders Investment  
or Net Worth (R.O.I)**

**= Net Profit (after interest and tax)  
Shareholder's Fund**

**Net Profit for five years :**

1980-81	5,07,190.37
1981-82	-13,66,075.42
1982-83	-11,28,240.62
1983-84	-62,62,347.27
1984-85	-91,03,801.46

Shareholders fund consists of share capital + Reserve Fund + Depreciation fund + Development Rebate Reserve + Investment Allowance Reserve Fund + Capital redemption reserve fund + dividend equalisation fund + common good fund + Reserve for bad and doubtful fund + Building fund + Profit and Loss A/c Cr. balance - Profit and Loss A/c Dr. balance.

**Return on Shareholders Investment 1980-81**

Shareholders Fund = 8,59,63,652.68

N.P. (after tax and interest) = 5,07,190.37

**Net profit (after interest and tax)  
Shareholders Fund**

**=  $\frac{5,07,190.37}{8,59,63,652.68}$  = 0.06:1**

Return on Shareholders Investment 1981-82

Net Loss = -13,66,075.42

Shareholders Fund = 9,38,43,921.36

Net Loss  
Shareholders Fund

=  $\frac{-13,66,075.42}{9,38,43,921.36}$

= - 0.014:1

Return on Shareholders Investment 1982-83

Net Loss = -11,28,240.62

Shareholders Fund = 10,49,26,211.49

=  $\frac{\text{Net Loss}}{\text{Shareholder's Fund}}$

=  $\frac{-11,28,240.62}{10,49,26,211.49}$

= -0.011:1

Return on Shareholders Investment 1983-84

Net Loss = -62,62,347.27

Shareholders Fund = 11,84,62,498.29

=  $\frac{\text{Net Loss}}{\text{Shareholders Fund}}$

=  $\frac{-62,62,347.27}{11,84,62,498.29}$

= - 0.053:1

**Return on Shareholders Investment 1984-85**

**Net Loss = - 91,02,501.45**

**Shareholders Fund = 12,84,19,500.16**

**Net Loss**  
**Shareholders Fund**

**= -  $\frac{91,02,501.45}{12,84,19,500.16}$**

**= - 0.0731**

**For Shareholder's fund see chart.**

Return on Equity Capital :

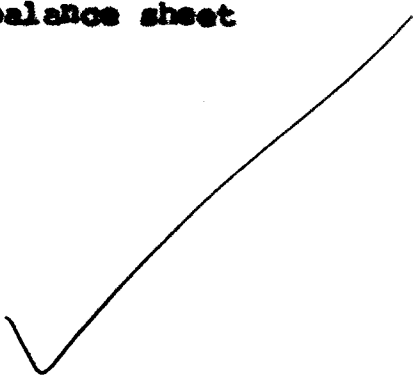
Net Profit after tax and Prof. div.  
Paid up equity capital

Net profit for five years as per balance sheet

1980-81	Profit	5,07,190.37
1981-82	Loss	-13,66,075.42
1982-83	Loss	-11,28,240.62
1983-84	Loss	-62,62,347.21
1984-85	Loss	-91,03,801.46

Paid up capital for five years as per balance sheet

1980-81	75,68,000.00
1981-82	75,68,000.00
1982-83	72,68,000.00
1983-84	69,68,000.00
1984-85	64,08,000.00



Return on equity capital

$$1980-81 = \frac{5,07,190.37}{75,68,000.00}$$
$$= 0.066$$

$$1981-82 = \frac{-13,66,075.42}{75,68,000.00}$$
$$= 0.180$$

1982-83 =  $\frac{-11,28,240.62}{72,68,000.00}$   
 = - 0.155  
 1983-84 =  $\frac{62,62,347.21}{69,68,000.00}$   
 = -0.898.  
 1984-85 =  $\frac{-91,03,801.46}{64,08,000.00}$   
 = -1.421.

Earning per share (E.P.S.) =  $\frac{\text{Net profit after tax and dividend}}{\text{No. of equity shares}}$

**Net profit for five years as per balance sheet**

1980-81	Profit	5,07,190.37
1981-82	Loss	-13,66,075.42
1982-83	Loss	-11,28,240.62
1983-84	Loss	-62,62,347.27
1984-85	Loss	-91,03,801.46

**Number of equity shares for five years**

1980-81	75.68
1981-82	7568
1982-83	7268
1983-84	6968
1984-85	6408

E.P.S. 1980-81 =  $\frac{5,07,190.37}{7568}$

= 67.01.

E.P.S. 1981-82 =  $\frac{-13,66,075.42}{7568}$   
 = -180.50  
 E.P.S. 1982-83 =  $\frac{11,28,240.62}{7268}$   
 = - 155.23  
 E.P.S. 1983-84 =  $\frac{-62,62,147.27}{6968}$   
 = - 898.73  
 E.P.S. 1984-85 =  $\frac{-21,03,801.46}{6408}$   
 = - 1420.69

Return on capital employed :

=  $\frac{\text{Profit (before tax and interest)}}{\text{Capital employed}} \times 100$

Net profit before tax and interest

Net profit + Tax + Interest

1980-81	Net profit	5,07,190.37
	Tax	-
	Interest	55,54,851.19
	Net Profit	<u>60,62,041.56</u>
1981-82	Net Loss	-13,66,075.42
	Tax	-
	Interest	84,63,734.82
	Net Profit	<u>70,97,659.40</u>

1982-83	Net Loss	-11,28,240.62
	Tax	-
	Interest	96,21,094.19
	Net Profit	<u>84,92,853.57</u>
1983-84	Net Loss	-62,62,347.27
	Tax	-
	Interest	1,90,60,216.79
	Net Profit	<u>56,97,869.52</u>
1984-85	Net Loss	-91,03,801.46
	Tax	3,28,316.00
	Interest	1,33,43,540.33
	Net Profit	<u>45,68,054.87</u>

The term capital employed consists of -

- a) Fixed Assets
- +b) Investments
- +c) Current Assets
- Current Liabilities

Fixed assets includes land, building and roads, plant and machinery, dead stock and furniture, boiler and steam pipe line, fire hydrants, weight and measures, works instruments, vehicles, water installation, telephone and telex installation, trolley line, jackwell pipe line, library books.

Investments includes investment made in National Savings Bonds, Corporate Society shares 5% debentures of Industrial Finance Corporation of India.

Current assets includes cash, bank, excise account, current stores and spare parts, coal, cotton at godown, cotton in work in process yarn in work in process, yarn at packing section and bonded godown, yarn at selling centre, saleable cotton waste at godown, hard waste, debtors, deposits, purchases of cotton, stores purchases and expenses, building construction, purchases of machinery, employees, purchases of shares, earnest octroi money, excise duty refundable, sales tax refundable, prepaid insurance, prepaid expenses, advance payment of income tax.

Current liabilities includes sundry ces, expenses, education fund subscription, others, sales tax, interest, provision for income tax, Dividend, gratuity, provision, refundable deposits from members, the Maharashtra State Co-operative Bank Ltd., Bombay - Loan (a) Hypothecated Cotton and yarn stock, (b) Mortgage, (c) Clearn cash credit, (d) Free-shipment cash credit, Deposits from contractors, yarn takers and others.

Capital employed Ratio 1980-81

Fixed Assets	8,68,67,103.51
+Investments	13,05,450.00
	<u>8,81,72,553.51</u>



+ Current Assets	6,62,63,726.85	2,30,13,505.17
- Current Liabilities	4,32,50,221.68	
	<u>2,30,13,505.17</u>	
Capital employed		<u>11,11,86,058.68</u>

Capital employed Ratio 1980-81

$$\frac{\text{Net profit (before tax and interest)}}{\text{Capital employed}} \times 100$$

$$= \frac{60,62,041.86}{11,11,86,058.68} \times 100$$

$$= 5.45\%$$

Capital employed for 1981-82

Fixed Assets		10,44,01,702.09
+Investments		13,16,450.00
		<u>10,57,18,152.09</u>
+Current Assets	8,31,38,281.69	
-Current Liabilities	5,54,57,868.98	
	<u>2,76,80,412.71</u>	
Capital employed		<u>13,33,98,564.80</u>

Capital employed Ratio 1981-82

$$\frac{\text{Net Profit}}{\text{Capital employed}} \times 100$$

$$= \frac{70,97,652.40}{13,33,98,564.80} \times 100$$

$$= 5.32\%$$

Capital Employed Ratio 1982-83

Fixed Assets		12,36,45,855.16
+Investments		15,07,450.00
		<u>12,51,53,305.16</u>
		2,41,81,561.15
+Current Assets	8,54,11,211.51	
-Current Liabilities	6,12,29,650.36	
	<u>2,41,81,561.15</u>	
	Capital employed	<u>14,93,34,866.31</u>

Capital employed ratio

$$\begin{aligned} &= \frac{\text{Net Profit}}{\text{Capital employed}} \times 100 \\ &= \frac{84,92,853.57}{14,93,34,866.31} \times 100 \\ &= 5.68\% \end{aligned}$$

Capital Employed Ratio 1983-84

Fixed Assets		13,99,20,736.11
+Investments		15,62,700.00
		<u>14,14,83,436.11</u>
		2,06,15,972.88
+Current Assets	8,31,58,363.47	
-Current Liabilities	6,25,43,390.59	
	<u>2,06,15,972.88</u>	
		<u>16,20,99,408.99</u>

Capital employed Ratio

$$\begin{aligned} &= \frac{\text{Net Profit}}{\text{Capital employed}} \times 100 \\ &= \frac{56,97,859.52}{16,20,99,408.99} \times 100 \\ &= 3.51\% \end{aligned}$$

Capital Employed Ratio 1984-85

Fixed Assets		14,81,37,836.78
+Investments		13,63,200.00
		<u>14,95,01,036.78</u>
+Current Assets	8,11,47,651.64	1,63,99,321.59
-Current Liabilities	6,47,48,330.05	
	<u>16,39,99,321.59</u>	
	Capital employed	<u>16,59,00,358.37</u>

Capital employed Ratio

$$\begin{aligned} &= \frac{\text{Net Profit}}{\text{Capital employed}} \times 100 \\ &= \frac{45,68,054.87}{16,59,00,358.37} \times 100 \\ &= 2.75\% \end{aligned}$$

#### 4.6 ACTIVITY RATIOS :

##### Inventory Turnover Ratio :

This ratio is calculated as follows :

$$= \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

Average inventory is derived as average of opening inventory and closing inventory. Opening inventory consists cotton at godown, cotton in work in progress, Yarn-in work in progress, yarn in packing section and bonded godown, yarn at selling centre, saleable cotton waste at godown, hard waste.

Closing inventory consists of cotton at godown, cotton in work in progress, yarn in work in progress, yarn at packing section and bonded godown, yarn at selling centre, hard waste.

##### Opening Stock 1980-81

Cotton in godown	2, 51, 24, 392.87
Cotton work in process	12, 37, 006.23
Yarn in work in process	2, 13, 744.40
Yarn in packing section and bonded godown	36, 91, 469.92
Yarn at selling centre	26, 89, 400.99
Saleable cotton waste at godown	3, 67, 433.01
<b>Total opening inventory</b>	<b>3, 33, 23, 447.42</b>

Closing Stock 1980-81	2,95,71,208.44
Cotton in godown	16,95,259.48
Cotton work in process	8,63,084.65
Yarn in work in progress	60,27,009.26
Yarn in packing section and Bonded godown	33,24,985.30
Yarn at selling centre	6,82,463.15
Saleable cotton waste at godown	

Total closing inventory 3,91,64,010.28

(Total opening inventory + Total closing inventory)  
2

$$= (3,33,23,447.42 + 3,91,64,010.28) \times \frac{1}{2}$$

$$= (7,24,87,457.70) \times \frac{1}{2}$$

$$= 3,62,23,728.80.$$

Cost of goods sold

$$= \text{Sales} - \text{G.P.}$$

$$= 11,53,76,919.61 - 1,80,68,839.58$$

$$= 9,73,08,080.03$$

Cost of goods sold

Average inventory

$$= \frac{9,73,08,080.03}{3,62,23,728.80}$$

$$= 2.68$$

$$= 2.68$$

Closing Inventory 1981-82

Opening Inventory

Cotton in godown	2,95,71,208.44
Cotton work in process	16,95,259.48
Yarn in work in process	8,63,084.65
Yarn in packing section and Bonded godown	60,27,009.26
Yarn at selling centre	33,24,985.30
Saleable cotton waste at godown	6,82,463.15
Total opening inventory	<u>3,91,64,010.28</u>

Closing Inventory

Cotton in godown	3,72,52,307.39
Cotton in work in process	16,52,220.91
Yarn in work in process	8,32,619.78
Yarn in packing section and Bonded godown	66,97,409.71
Yarn at selling centre	28,67,335.26
Saleable cotton waste at godown	2,71,106.81
Total closing inventory	<u>4,96,72,999.86</u>

Average inventory

$$\begin{aligned} &= \frac{(\text{Opening inventory} + \text{Closing inventory})}{2} \\ &= \frac{3,91,64,010.28 + 4,96,72,999.86}{2} \\ &= \frac{8,88,37,010.14}{2} \\ &= 4,44,18,505.07 \end{aligned}$$

**Cost of goods sold**

= Sales - G.P.

= 13,60,34,235.67 - 2,00,02,120.69

= 11,60,32,114.98

**Inventory turnover for 1981-82**

=  $\frac{\text{Cost of goods sold}}{\text{Average inventory}}$

=  $\frac{11,60,32,114.98}{4,43,68,505.07} \times 2.60$

**Inventory Turnover for the year 1982-83**

**Opening Inventory**

Cotton in godown	3,72,52,307.39
Cotton work in progress	16,52,530.91
Yarn in work in progress	8,32,619.78
Yarn in packing section and Bonded godown	66,97,409.71
Yarn at selling centre	28,67,335.26
Saleable cotton waste at godown	2,71,106.81

**Total Opening Inventory** 4,95,72,999.86

**Closing Inventory**

Cotton in godown	3,30,21,678.62
Cotton work in process	17,60,193.49
Yarn in work in progress	13,76,156.51
Yarn in packing section and Bonded godown	1,07,40,989.26

Yarn at selling centre	45,44,296.31
Saleable cotton waste at godown	2,64,821.59
Hardwaste	21,847.95
<b>Total Closing Inventory</b>	<b>5,18,29,943.73</b>

Average Inventory

= (Opening + Closing)  $\times \frac{1}{2}$

=  $\frac{(4,95,72,999.86 + 5,18,29,943.73)}{2}$

= (10,14,02,943.59)  $\times \frac{1}{2}$

= 5,07,14,717.79

Cost of goods sold

= Sales - G.P.

= 14,05,74,717.59 - 2,47,95,957.90

= 11,57,78,759.69

Inventory Turnover

=  $\frac{\text{Cost of goods sold}}{\text{Average Inventory}}$

=  $\frac{11,57,78,759.69}{5,07,01,471.79}$

= 2.28

1983-84

Opening Inventory	3,30,21,678.62
Cotton in godown	17,60,193.49
Cotton work in process	13,76,156.51
Yarn work in process	1,07,40,949.26
Yarn in packing section and Bonded godown	45,44,296.31





Yarn at selling centre	2,64,821.59
Saleable cotton waste at godown	21,847.95
Hardwaste	
<b>Total opening inventory</b>	<b>5,18,29,943.73</b>

**Closing inventory**

Cotton in godown	3,33,18,429.99
Cotton work in process	21,75,520.77
Yarn work in process	31,94,547.84
Yarn in packing section and Bonded godown	1,90,32,586.64
Yarn at selling centre	1,03,47,760.80
Saleable cotton waste at godown	4,70,688.07
Hardwaste	-
<b>Total closing inventory</b>	<b>6,85,39,534.11</b>

**Average Inventory**

$$\begin{aligned}
 &= (\text{Opening} + \text{Closing}) \times \frac{1}{2} \\
 &= (5,18,29,943.73 + 6,85,39,534.11) \times \frac{1}{2} \\
 &= (1,20,69,477.84) \times \frac{1}{2} \\
 &= 6,01,84,739.42
 \end{aligned}$$

**Cost of goods sold**

$$\begin{aligned}
 &= \text{Sales} - \text{G.P.} \\
 &= 14,19,36,395.04 - 2,99,40,947.89 \\
 &= 11,19,95,447.15
 \end{aligned}$$

$$\text{Inventory Turnover Ratio} = \frac{11,19,95,447.15}{6,01,84,739.42}$$

$$= 1.86:1$$

**1984-85**

**Opening Inventory**

Cotton in godown	2,21,18,489.99
Cotton in process	21,75,530.77
Yarn in process	21,94,567.84
Yarn in packing section and Banded godown	1,90,22,586.64
Yarn at selling centre	1,02,47,760.80
Saleable cotton waste at godown	4,70,668.07
Hardware	

**Total opening inventory** 6,85,30,534.11

**Closing Inventory**

Cotton in godown	1,41,91,008.77
Cotton in process	17,96,881.30
Yarn in process	20,22,044.61
Yarn in packing section and Banded godown	1,22,84,996.06
Yarn at selling centre	66,91,341.87
Saleable cotton waste at godown	6,20,020.56
Hardware	67,174.80

**Total closing inventory** 1,82,64,484.37

**Average Inventory**

$$\begin{aligned} &= (\text{opening} + \text{closing}) \times \frac{1}{2} \\ &= \frac{(6,85,30,534.11 + 1,82,64,484.37)}{2} \\ &= \frac{(12,68,05,018.48)}{2} \\ &= 6,34,02,509.24 \end{aligned}$$

**Inventory Turnover**

$$= \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

$$= \frac{(19,04,39,964.88 - 2,45,87,455.22)}{6,22,02,000.74}$$

$$= \frac{16,59,52,509.66}{6,22,02,000.74}$$

$$= 2.66$$

**Debtors Turnover Ratio/Velocity**

$$= \frac{\text{Net Credit Annual Sales}}{\text{Average Trade Debtors}}$$

Here for calculation net annual credit sales mean total sales are taken.

Average trade debtors means total debtors i.e. debtors from sale of yarn and others are taken.

Total sales consists of sale of yarn, cotton waste and hardwaste.

<u>Year</u>	<u>Total debtors as per Balance sheet</u>
1980-81	30,74,131.86
1981-82	20,95,044.52
1982-83	10,37,682.13
1983-84	20,89,321.41
1984-85	31,92,935.12

**Total Net Sales as per Trading**

**Account**

1980-81	11,53,76,919.61
1981-82	13,60,34,235.47
1982-83	14,05,74,717.59
1983-84	14,19,36,395.04
1984-85	19,04,39,964.88

**Debtors Turnover Ratio for 1980-81**

**Total Annual Sales**  
**Debtors**

**11,53,76,919.61**  
**= 30,74,131.86**

**= 37.53:1**

**Debtors Turnover Ratio for 1981-82**

**Total Annual Sales**  
**Debtors**

**13,60,34,235.47**  
**= 20,95,044.52**

**= 64.93:1**

**Debtors Turnover Ratio for 1982-83**

**Total Annual Sales**  
**Debtors**

**14,05,74,717.59**  
**= 10,87,682.13**

**= 135.55:1**

Debtors Turnover Ratio for 1983-84

$$= \frac{\text{Total Annual Sales}}{\text{Debtors}}$$

$$= \frac{14,19,36,395.04}{20,89,321.41}$$

$$= 67.94:1$$

Debtors Turnover Ratio for 1984-85

$$= \frac{\text{Total Annual Sales}}{\text{Debtors}}$$

$$= \frac{19,04,39,964.88}{31,12,935.12}$$

$$= 61.19:1$$

Average Collection Period :

$$\frac{\text{Trade Debtors}}{\text{Net Sales}} \times \text{No. of working days}$$

No. of working days are considered as 365 days.

Trade Debtors for five years.

The term debtors includes debtors about sale of yarn and other debtors

Year	Debtors		Total
	Sale of yarn + other =		
1980-81	1,96,980.83	+ 28,77,151.03	= 3,30,74,131.86
1981-82	3,17,698.83	+ 17,77,345.69	= 20,95,044.52
1982-83	5,43,832.43	+ 4,93,849.70	= 10,37,682.13
1983-84	12,26,857.89	+ 8,62,463.52	= 20,89,321.41
1984-85	3,47,526.16	+ 28,45,408.96	= 31,92,935.12

Net Sales for five years

Sales includes sale of yarn, cotton waste, and hard-waste.

Total net sales as per Trading Account

1980-81	11,53,76,919.61
1981-82	13,60,34,235.47
1982-83	14,05,74,717.59
1983-84	14,19,36,895.04
1984-85	19,04,39,864.88

Debtors Average Collection Ratio for 1980-81

$\frac{\text{Trade Debtors}}{\text{Net Sales}} \times \text{No. of working days}$

$$= \frac{20,74,131.86}{11,53,76,919.61} \times 365$$

= 9.72 days i.e. 10 days.

Debtors Average Collection Period 1981-82

$\frac{\text{Trade Debtors}}{\text{Net sales}} \times \text{No. of working days}$

$$= \frac{20,95,044.52}{13,60,34,235.47} \times 365$$

= 5.62 days i.e. 6 days.

**Debtors Average Collection Period for 1982-83**

$\frac{\text{Trade Debtors}}{\text{Net Sales}} \times \text{No. of working days}$

$$= \frac{10,37,682.13}{14,05,74,717.59} \times 365$$

$$= 2.69 \text{ days i.e. 3 days.}$$

**Debtors Average Collection Period for 1983-84**

$\frac{\text{Trade Debtors}}{\text{Net Sales}} \times \text{No. of working days}$

$$= \frac{20,89,321.41}{14,19,35,395.04} \times 365$$

$$= 5.37 \text{ days i.e. 6 days.}$$

**Debtors Average Collection Period for 1984-85**

$\frac{\text{Trade Debtors}}{\text{Net Sales}} \times \text{No. of working days}$

$$= \frac{31,92,935.12}{19,04,39,964.88} \times 365$$

$$= 6.11 \text{ days i.e. 7 days.}$$

**Creditors Turnover Ratio or Creditors Velocity**

$= \frac{\text{Net Annual Credit Purchases}}{\text{Trade Creditors}}$

**Annual Purchases and Creditors**

	<u>Annual Purchases</u>	<u>Creditors</u>
1980-81	7,43,95,578.78	26,76,084.51
1981-82	8,68,25,852.80	8,82,178.69
1982-83	8,54,91,904.58	33,35,687.15
1983-84	8,54,91,904.58	33,35,687.15
1984-85	10,31,17,805.81	63,61,212.24

Creditors Velocity for 1980-81

Annual Purchases  
= Trade Creditors

7,43,95,578.78  
= 26,76,084.61

= 27.80:1

Creditors Velocity for 1982-83

Annual Purchases  
= Trade Creditors

8,68,25,852.80  
= 8,82,178.69

= 98.42:1

Creditors Velocity for 1982-83

Annual Purchases  
= Trade Creditors

7,56,69,332.10  
= 23,11,637.97

= 32.73:1

Creditors Velocity for 1983-84

Annual Purchases  
= Trade Creditors

8,54,91,904.58  
= 33,35,687.15

= 25.63:1

Creditors Velocity for 1984-85

Annual Purchases  
= Trade Creditors

10,31,17,805.81  
= 63,61,212.24

= 16.21:1



Creditors Average Payment Period :

$$= \frac{\text{Total Trade Creditors}}{\text{Average Daily Purchases}}$$

$$= \frac{\text{Total Trade Creditors}}{\text{Total Purchases}} \times \text{No. of working days}$$

Total Trade Creditors as per Balance Sheet

<u>Year</u>	<u>Sundry Creditors</u>
1980-81	26,76,084.51
1981-82	8,82,178.69
1982-83	23,11,637.97
1983-84	33,35,687.15
1984-85	63,61,212.24

Total Purchases as per Manufacturing Account

<u>Year</u>	<u>Cotton Purchases</u>
1980-81	7,43,95,578.78
1981-82	8,68,25,852.80
1982-83	7,56,69,332.10
1983-84	8,54,91,904.58
1984-85	10,31,17,805.81

Average payment period for 1980-81

$$= \frac{\text{Total Trade Creditors}}{\text{Total Purchases}} \times 365$$

$$= \frac{26,76,084.51}{7,43,95,578.78} \times 365$$

= 13.13 days i.e. 14 days.

**Average Payment Period for 1981-82**

$$= \frac{\text{Total Trade Creditors}}{\text{Total Purchases}} \times 365$$

$$= \frac{8,82,178.69}{8,68,25,852.80} \times 365$$

$$= 3.71 \text{ i.e. } 4 \text{ days}$$

**Average Payment Period for 1982-83**

$$= \frac{\text{Total Trade Creditors}}{\text{Total Purchases}} \times \text{No. of working days}$$

$$= \frac{23,11,637.87}{7,56,69,332.10} \times 365$$

$$= 11.15 \text{ days i.e. } 12 \text{ days}$$

**Average Payment Period for 1983-84**

$$= \frac{\text{Total Trade Creditors}}{\text{Total Purchases}} \times \text{No. of Working days}$$

$$= \frac{33,35,687.15}{8,54,91,904.58} \times 365$$

$$= 14.24 \text{ days i.e. } 15 \text{ days}$$

**Average Payment Period for 1984-85**

$$= \frac{\text{Total Trade Creditors}}{\text{Total Purchases}} \times \text{No. of working days}$$

$$= \frac{63,61,212.24}{10,31,17,805.81} \times 365$$

$$= 22.51 \text{ days i.e. } 23 \text{ days}$$

**Working Capital Turnover :**

This ratio is the relationship of the number of times a unit invested in working capital produces sale.

$$\text{Working Capital Turnover} = \frac{\text{Net Sales}}{\text{Net Working Capital}}$$

This ratio indicates the efficiency or inefficiency in the use of whole working capital.

Sales consists of sales of yarn, cotton waste and hardwaste.

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities.}$$

Current assets of the mill are cash, bank, excise account current, stores and spares parts, coal, cotton at godown, cotton in process, yarn in process, yarn at packing section and bonded godown, yarn at selling centre, saleable cotton waste, at godown, hardwaste, debtors, deposits, purchases of cotton, stores purchases and expenses, building construction, purchases of machinery, employees, purchases of shares, earnest octroi money, refundable excise duty, refundable sales tax, prepaid insurance, prepaid expenses, advance payment of income tax etc.

Current liabilities includes refundable deposits from members, loan taken from the Maharashtra State Co-operative Bank Ltd., Bombay (a) Hypothecated cotton and yarn stock, b) Mortgage c) Clean cash credit, freeshipment cash credit.

Deposits from contractors, yarn and others, sundry, creditors, expenses, education fund, subscription, others, sales tax, interest, provision for income tax, dividend, gratuity, provision.

Sales for five years

1980-81	11,53,76,919.61
1981-82	13,60,34,235.47
1982-83	14,05,74,717.59
1983-84	14,19,36,395.04
1984-85	19,04,39,964.88

**Net Working Capital = Current Assets - Current Liabilities**

**Current Assets - Current Liabilities**

1980-81	6,69,96,908.34 - 4,32,50,221.68 = 2,35,46,686.66.
1981-82	8,38,74,225.68 - 5,54,57,868.98 = 2,82,16,356.70
1982-83	8,65,61,144.13 - 6,12,29,650.36 = 2,53,38,183.77
1983-84	8,41,80,732.16 - 6,25,43,390.59 = 2,16,37,341.57
1984-85	8,21,81,630.91 - 6,47,48,330.05 = 1,74,33,300.86.

**Working Capital Turnover Ratio**

$$= \frac{\text{Net Sales}}{\text{Net Working Capital}}$$

1980-81	=	$\frac{11,53,76,919.61}{2,35,46,686.66}$
	=	4.90:1
1981-82	=	$\frac{13,60,34,235.47}{2,82,16,356.70}$
	=	4.82:1
1982-83	=	$\frac{14,05,74,717.59}{2,53,38,183.77}$
	=	5.55:1
1983-84	=	$\frac{14,19,36,395.04}{2,16,37,341.57}$
	=	6.56:1
1984-85	=	$\frac{19,04,39,964.88}{1,74,33,300.86}$
	=	10.92:1

**For Net Working Capital see Chart of current assets and current liabilities.**